Performance Par Excellence





Quenching Oils









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DIVYOL QUENCHING OIL 39

Section 1: Identification of the Substance / Mixtur	e			
1.1 Product identifier				
Product name	Divyol Quenching Oil 39			
Product description	Quenching Oil			
Product type	Industrial Oil			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Industrial			
Formulation & (re)packing of substance & mixtures	Industrial			
Manufacture of substance	Industrial			
Functional fluids	Industrial			
Section 2: Hazard Identification	1			
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
Section 3: Compostion / Information on Ingredier	its			
Product / Ingredient name	CAS No.: Not applicable for blende Distillates (Petroleum) mixture of h			
Section 4: First Aid Measures	·			
Inhalation exposure	Remove to fresh air & provide oxyc	gen, if breathing is difficult. Contact physician		
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mixtu	re			
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures						
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Flammability limits in air (lower), % by volume

Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	tection
The list of Identified Uses in Section 1 should be co	nsulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -6°C (ASTM D-97)
Flash point	> 200 °C
	Nach as a flack la
Evaporation rate Flammability (solid, gas)	Not available



≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

Not available

0.88 max at 15 °C





Solubility (water)	Insoluble in wat	ter				
			Not available			
Decomposition temperature No data						
Auto-ignition temperature	>300 °C					
Kinematic viscosity at 40 °C (104 °	32 cst (ASTM D	445) (Typical Value)				
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de. H ₂ S, SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound		P	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica						
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
luuitestisus (seumestisus						
Irritation / corrosion						
Skin		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory		No data availata	lo to indicato product en enco	omponente present avector de	an 0 1 % are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			base oil(s) in this product is based on an severely hydrotreated distillate.			
Reproductive toxicity			duct should not be regarded as a carcinogen. Is no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure	NOT CLASSIFIED				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
ngestion May be fatal if swallowed and enters airways.						
Potential chronic health effects						
General	No known signi	ificant effects or critical hazard	s.			
Carcinogenicity			n this product is based on an s		. The product should not be	







Mutagenicity							
Teratogenicity		No known significant effects or critical hazards.					
Product / ingredient name							
Fertility effects		Not available					
Other information Specific hazard		NOT AVAIIAD	le				
Section 12: Ecological Information		N					
12.1 Toxicity			ed to be harmful to aquatic org	janisms.			
12.2 Persistence and degradability			ntly biodegradable.		le titte og føde te og mendes og		
12.3 Bioaccumulative potential			iation is unlikely to be significa ered mobile.	nt because of the low water solu	ibility of this product.		
12.4 Mobility in soil 12.5 Results of PBT & vPvB assessment							
12.5 Results of PB1 & VPVB assessment		Not applica		n water curfaces causing physics	al damago to organisms		
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration	าร						
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	tion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.			
Methods of disposal				d or minimised wherever possib ly be considered when recycling	1 3 3		
Section 14: Transport Information							
International transport regulations							
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	_		
14.3 Transport hazard class(es)	-		-	-	-		
14.4 Packing group	_		-	-	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		-	-	_		
14.6 Special precautions for user oils							
14.7 Transport in bulk according to An	nex of MARPOL	73/78 and th	e IBC Code				
Section 15: Regulatory Informatio							
		slation speci	fic for the substance or mixtur	e EU Regulation (EC) No. 1907/	2006 (REACH)		
15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern							
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.							
International Lists National Inventory	Inventory name						
Australia	ustralia Au			Australian Inventory of Chemical Substances (AICS) – Yes			
Canada	Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No						
China	Inventory of Existing Chemical Substances in China (IECSC) – Yes						
China		inventory 0	a existing chemical substances				







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





DIVYOL QUENCHING OIL 39I

Section 1: Identification of the Substance / Mixtur	e			
1.1 Product identifier				
Product name	Divyol Quenching Oil 39l			
Product description	Quenching Oil			
Product type	Industrial Oil			
MARPOL Annex-1	****			
1.2 Identified uses	1			
Distribution of substance	Industrial			
Formulation & (re)packing of substance & mixtures	Industrial			
Manufacture of substance	Industrial			
Functional fluids	Industrial			
Section 2: Hazard Identification				
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
Section 3: Compostion / Information on Ingredier	nts			
Product / Ingredient name	CAS No.: Not applicable for blende Distillates (Petroleum) mixture of h			
Section 4: First Aid Measures				
Inhalation exposure	Remove to fresh air & provide oxyc	gen, if breathing is difficult. Contact physician		
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mixtu	re			
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures						
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Flammability limits in air (lower), % by volume

Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ection
The list of Identified Uses in Section 1 should be con-	sulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	 AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -10°C (ASTM D-97)
Flash point	> 195 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available

≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

Not available

0.88 max at 15 °C





		1				
			Insoluble in water			
Partition coefficient (n-octanol/water) No		Not available	Not available			
Decomposition temperature No o			No data			
Auto-ignition temperature	>300 °C					
Kinematic viscosity at 40 °C (104 °	30.47 cst (ASTN	1 D 445) (Typical Value)				
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ing	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le H.S.SQ. (sulphur oxides) or	e solid and liquid	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin						
Respiratory		No known sign	ificant effects or critical hazard	S.		
· · ·		No data availab	le to indicate product or any o	omponents present greater th	an 0.1 % are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		<u>.</u>	
Reproductive toxicity			ould not be regarded as a carci gredient listed as toxic to repro			
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure	. tot clussified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
Ingestion	stion May be fatal if swallowed and enters airways.					
Potential chronic health effects						
General	No known sign	ificant effects or critical hazard	S.			
Carcinogenicity		The base oil(s) i regarded as a c	in this product is based on an s arcinogen.	everely hydrotreated distillate	e. The product should not be	







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known :	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Net over eat		1		
12.1 Toxicity			ed to be harmful to aquatic org	dillSillS.		
12.2 Persistence and degradability			ntly biodegradable.		u bilitu u ofi tibio unu o du ot	
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil			Not considered mobile.			
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to authorisation Annex XIV		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
PBT	Persistent, Bio accumulative and Toxic.		

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Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.	
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





DIVYOL QUENCHING OIL 39L

Section 1: Identification of the Substance / Mixtur	Section 1: Identification of the Substance / Mixture				
1.1 Product identifier					
Product name	Divyol Quenching Oil 39L				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredier	nts				
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact	Remove contaminated clothing. Fl If irritation occurs, call a physician.	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixtu	re				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters		oving all persons from the vicinity of the incident if there is a fire. No personal risk or without suitable training.			
Special protective equipment for firefighters	(SCBA) with a full face- piece opera helmets, protective boots and glov	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Flammability limits in air (lower), % by volume

Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	itection
-	onsulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for comparison with limit values furopean Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.
Section 9: Physical and Chemical Propertie	S
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -10°C (ASTM D-97)
Flash point	> 190 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available



≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

Not available

0.88 max at 15 °C





Solubility (water)		Insoluble in wa	ter		
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature		No data			
Auto-ignition temperature		>300 °C			
Kinematic viscosity at 40 °C (104 °	F)	24.17 cst (ASTN	1 D 445) (Typical Value)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic		
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica					
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
rioduct/ingredient name		ts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LC 50 Inhalation dusts and mists LD 50 Dermal		Rabbit	> 5000 mg/kg	TIOUIS
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	
	LD 30 01		nat	>15000 mg/kg	
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory					
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate.			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	gle exposure				
Specific target organ toxicity – rep	• •	Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exposure		Not available			
Potential acute health effects					
Eve contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact			ificant effects or critical hazard		
Ingestion		May be fatal if swallowed and enters airways.			
Potential chronic health effects					
General		No known sian	ificant effects or critical hazard	S.	
Carcinogenicity			n this product is based on an s		. The product should not be
		5	5		







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known :	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Net over eat		1		
12.1 Toxicity			ed to be harmful to aquatic org	dillSillS.		
12.2 Persistence and degradability			ntly biodegradable.		u bilitu u ofi tibio unu o du ot	
12.3 Bioaccumulative potential				nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil			Not considered mobile.			
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to authorisation Annex XIV		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
PBT	Persistent, Bio accumulative and Toxic.		

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





DIVYOL QUENCHING OIL 39LI

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier					
Product name	Divyol Quenching Oil 39Ll				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses	·				
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification	1				
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredients					
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician				
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixture					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters		oving all persons from the vicinity of the incident if there is a fire. No personal risk or without suitable training.			
Special protective equipment for firefighters	(SCBA) with a full face- piece opera helmets, protective boots and glow	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			

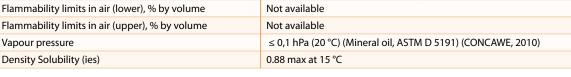


Vapour pressure

Density Solubility (ies)



The list of Identified Uses in Section 1 should be a	otection onsulted for any available use-specific information provided in the Exposure Scenario(s).			
8.1 Control parameters	Sinsulted for any available use-specific information provided in the exposure scenario(s).			
Occupational exposure limits				
Product / Ingredient name	Distillates, mixture of hydrocarbons			
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.			
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for comparison with limit values furopean Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.			
Individual protection measures				
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.			
Eye / face protection	Recommended: Safety glasses with side shields.			
Skin protection				
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.			
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.			
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.			
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.			
Section 9: Physical and Chemical Propertie	S			
Appearance	Clear			
Physical state	Liquid			
Colour	Yellow			
Odor	Petroleum odor			
Odour threshold	Not available			
pH	Not applicable			
Pour point	< -12°C (ASTM D-97)			
Flash point	> 200 °C			
Evaporation rate	Not available			
Flammability (solid, gas)	Not available			









Solubility (water)		Incoluble in wat	tor		
		Insoluble in wat Not available			
		No data			
Auto-ignition temperature	E)	>300 °C			
Kinematic viscosity at 40 °C (104 °l	F)		D 445) (Typical Value)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	ctions	Under normal c	onditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxid	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid sulphuric acid and
10.6 Hazardous decomposition	•		ganic and inorganic compound		
SECTION 11: Toxicological In					
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro treated heavy paraffinic	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-
acated neary paramine	LD 50 Ora	al	Rat	>15000 mg/kg	-
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory					
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity			n this product is based on an s	everely hydrotreated distillate	
Carcinogenicity			•		•
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin		Not classified			
Specific target organ toxicity – rep	peated exposure				
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		No known signi	ficant effects or critical hazard	S.	
Ingestion		May be fatal if s	wallowed and enters airways.		
Potential chronic health effects					
General		No known signi	ficant effects or critical hazard	S.	
Carcinogenicity	The base oil(s)		bil(s) in this product is based on an severely hydrotreated distillate. The product should not be as a carcinogen.		







Mutagenicity					
Teratogenicity					
Product / ingredient name	0		significant effects or critical haz	ards.	
Fertility effects					
Other information Specific hazard		Not availab	ام		
Section 12: Ecological Information		Not availab			
		Net over eat		1	
12.1 Toxicity			ed to be harmful to aquatic org	dillSillS.	
12.2 Persistence and degradability			ntly biodegradable.		u bilitu u ofi tibio unu o du ot
12.3 Bioaccumulative potential			ered mobile.	nt because of the low water solu	ibility of this product.
12.4 Mobility in soil					
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.
Section 13: Disposal Consideration	าร				
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific
Product Methods of disposal	Where possible (e.g. in the absence of releva feasible and recommended. This substance of authorisations, relevant contamination limits or waste substance (not directly recyclable): qualified waste handlers. National legislation composition limits and methods for recovery		e can be burned or incinerated, iits, safety regulations and air qu 2): Disposal can be carried out di on may identify a specific organ	subject to national/local iality legislation. Contaminated rectly, or by delivery to	
Hazardous waste		Yes			
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.		
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.	
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information					
International transport regulations					
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	_		_	_	_
14.3 Transport hazard class(es)	_		_	_	_
14.4 Packing group	_		_	_	_
14.5 Environmental hazards	No		No	No	No
Additional Information	_		_	_	_
14.6 Special processions for user all					
14.6 Special precautions for user oils		72/70 and th	a IRC Codo		
14.7 Transport in bulk according to An		, 3/ / 6 and th			
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007	
Annex XIV – List of substances subject to authorisation Annex XIV		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed			
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Not applicable			
on the market and use of certain danger mixtures and articles.	ous substances,				
	ous substances,	Inventory I			
mixtures and articles.	ous substances,			res (AICS) – Yes	
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes		
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)	







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	ply with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
РВТ	Persistent, Bio accumulative and Toxic.		

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





DIVYOL QUENCHING OIL 40

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier	1.1 Product identifier				
Product name	Divyol Quenching Oil 40				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses	1				
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredier	its				
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.				
Section 4: First Aid Measures	1				
Inhalation exposure	Remove to fresh air & provide oxyg	gen, if breathing is difficult. Contact physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixtu	re				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures						
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning up						
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					



Flammability limits in air (lower), % by volume Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



	ection
8.1 Control parameters	sulted for any available use-specific information provided in the Exposure Scenario(s).
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	 AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measure and/or the necessity to use respiratory protective equipment. Reference should be made to monitorin standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperatur control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produ and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to accepta levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -6°C (ASTM D-97)
Flash point	> 220 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available

≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

0.88 max at 15 °C





		Insoluble in water			
Partition coefficient (n-octanol/water)		Not available			
Decomposition temperature No		No data			
Auto-ignition temperature >300		>300 °C			
Kinematic viscosity at 40 °C (104 °	F)	68 cst (ASTM D	445) (Typical Value)		
Explosive properties		No data			
Oxidising properties		No data			
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %			
Section 10: Stability and Rea	ctivity				
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	redients.
10.2 Chemical stability		Stable under no	ormal conditions		
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, h	nazardous reactions will not o	ccur. Oxidising agent.
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.	
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxid	a complex mixture of airborn	e solid and liquid
10.6 Hazardous decomposition	products		ganic and inorganic compound		
SECTION 11: Toxicological In	formation				
11.1 Information on toxicologica	al effects				
Acute toxicity					
Product / ingredient name	Result		Species	Dose	Exposure
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	_
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	_
Irritation / corrosion					
Skin					
Eye		No known significant effects or critical hazards.			
Respiratory					
Sensation					
Skin		No known significant effects or critical hazards.			
Respiratory					
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.			
Carcinogenicity				everely hydrotreated distillate	<u>.</u>
Reproductive toxicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.			
Specific target organ toxicity – sin	ale exposure				
Specific target organ toxicity – rep		Not classified			
Aspiration hazard		Aspiration hazard – Category 1			
Information on likely routes of exp	oosure	Not available			
Potential acute health effects					
Eye contact		Eye contact may cause redness and transient pain.			
		-	Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.		
Skin contact			ificant effects or critical hazard		,
Ingestion			swallowed and enters airways.		
Potential chronic health effects					
General		No known signi	ificant effects or critical hazard	5.	
Carcinogenicity		The base oil(s) i	No known significant effects or critical hazards. The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.		
		regulated as a C	areniogen.		







Mutagonicity					
Mutagenicity					
Teratogenicity		No known s	significant effects or critical haz	zards.	
Product / ingredient name					
Fertility effects					
Other information Specific hazard		Not availab	le		
Section 12: Ecological Information					
12.1 Toxicity			ed to be harmful to aquatic org	janisms.	
12.2 Persistence and degradability			ntly biodegradable.		
12.3 Bioaccumulative potential			· · ·	nt because of the low water solu	ability of this product.
12.4 Mobility in soil			ered mobile.		
12.5 Results of PBT & vPvB assessment		Not applica			
12.6 Other adverse effects			n water. Spills may form a film o nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.
Section 13: Disposal Consideration	าร				
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	tion 1 should be consulted for ar	ny available use-specific
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal			
Hazardous waste		Yes			
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste desi	gnation.		
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.	
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Section 14: Transport Information					
International transport regulations					
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	_		_	_	_
14.3 Transport hazard class(es)	-		_	-	-
14.4 Packing group	_		_	-	-
14.5 Environmental hazards	No		No	No	No
Additional Information	_		_	-	_
14.6 Special precautions for user oils					
14.7 Transport in bulk according to An		73/78 and th	e IBC Code		
Section 15: Regulatory Informatio		, s, , o and th			
		dation coord	fic for the substance or mixture	e Ell Pequilation (EC) No. 1007/	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed			
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable			
International Lists National Inventory		Inventory r	name		
Australia		Australian I	nventory of Chemical Substand	ces (AICS) – Yes	
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No			
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes			
China		inventory o	in Existing Chemical Substances	$\sin \cos (100 - 100)$	







Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes		
Europe	European List of Notified Chemical Substances (ELINCS) – No		
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes		
Korea	Existing Chemicals List (ECL) – Yes		
New Zealand	New Zealand Inventory – Yes		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes		
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).		
Section 16: Other Information			
Revision comments			
Legend to abbreviations			
ADR	European agreement concerning the international carriage of dangerous good by road.		
RID	Regulations agreement concerning the international carriage of dangerous good by rail.		
IMDG Code	International Maritime Dangerous Goods Code.		
ICAO	International Civil Aviation Organization.		
IATA	International Air Transport Association.		
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.		
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].		
SCBA	Self-Contained Breathing Apparatus.		
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].		
LC 50	Median lethal concentration.		
LD 50	Median lethal dose.		
РВТ	Persistent, Bio accumulative and Toxic.		

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

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 Email
 info@gandharoil.com





DIVYOL QUENCHING OIL 42

Section 1: Identification of the Substance / Mixture					
1.1 Product identifier	1.1 Product identifier				
Product name	Divyol Quenching Oil 42				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses	1				
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification					
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredier	its				
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxyg	gen, if breathing is difficult. Contact physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixtu	re				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures						
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; howeve local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.					
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.					
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.					
6.3 Methods and material for containment and cleaning	up					
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.					
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.					
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.					
Section 7: Handling and Storage						
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.					
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.					
7.3 Specific end use(s) – Recommendations	Not available					

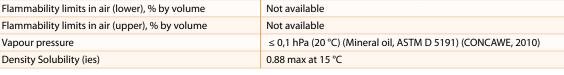


Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	onsulted for any available use-specific information provided in the Exposure Scenario(s).			
8.1 Control parameters	onsulted for any available use-specific information provided in the exposure scenario(s).			
Occupational exposure limits				
Product / Ingredient name	Distillates, mixture of hydrocarbons			
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.			
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.			
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.			
Individual protection measures				
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.			
Eye / face protection	Recommended: Safety glasses with side shields.			
Skin protection				
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.			
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.			
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.			
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.			
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
Section 9: Physical and Chemical Propertie	S			
Appearance	Clear			
Physical state	Liquid			
Colour	Yellow			
Odor	Petroleum odor			
Odour threshold	Not available			
pH	Not applicable			
Pour point	< -6°C (ASTM D-97)			
Flash point	> 195 °C			
Evaporation rate	Not available			
Flammability (solid, gas)	Not available			









Solubility (water)		Insoluble in water					
Partition coefficient (n-octanol/water)		Not available					
Decomposition temperature		No data					
Auto-ignition temperature		>300 °C					
Kinematic viscosity at 40 °C (104 °F)		32 cst (ASTM D 445) (Typical Value)					
Explosive properties		No data					
Oxidising properties		No data					
DMSO extractable compounds for base oil substance(s) according to IP346		Not available <3 %					
Section 10: Stability and Reactivity							
10.1 Reactivity		No specific test data related to reactivity available for this product or its ingredients.					
10.2 Chemical stability		Stable under normal conditions					
10.3 Possibility of hazardous reactions		Under normal conditions of storage and use, hazardous reactions will not occur. Oxidising agent.					
10.4 Conditions to avoid		Keep away from extreme heat and oxidising agents.					
10.5 Incompatible materials		Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and					
10.6 Hazardous decomposition	products	unidentified organic and inorganic compounds.					
SECTION 11: Toxicological In	formation						
11.1 Information on toxicologica	al effects						
Acute toxicity							
Product / ingredient name	Result		Species	Dose	Exposure		
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours		
Distillate (Petroleum), hydro	LD 50 Derr	nal	Rabbit	> 5000 mg/kg	-		
treated heavy paraffinic	LD 50 Ora	al	Rat	>15000 mg/kg	-		
Irritation / corrosion							
Skin							
Eye		No known signi	ificant effects or critical hazards	s			
Respiratory		no known significant cheets of chitear nazarus.					
Sensation							
Skin							
Respiratory		No known sign	ificant effects or critical hazard	S.			
Mutagenicity		No data availab multigene or ge	No data available to indicate product or any components present greater than 0.1 % are				
Carcinogenicity			in this product is based on an s	everely hydrotreated distillate			
carcinogenicity			•		•		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.					
Specific target organ toxicity – sin		Not classified					
Specific target organ toxicity – repeated exposure							
Aspiration hazard		Aspiration hazard – Category 1					
Information on likely routes of exposure		Not available					
Potential acute health effects							
			t may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.					
Skin contact		No known significant effects or critical hazards.					
Ingestion		May be fatal if swallowed and enters airways.					
Potential chronic health effects							
General		No known significant effects or critical hazards.					
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.					





Mutagenicity						
Teratogenicity						
Product / ingredient name		No known :	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Not expected to be harmful to aquatic organisms.				
12.1 Toxicity				dillSillS.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste	ardous waste					
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging	Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.			
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
					ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to Annex XIV	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances,		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





DIVYOL QUENCHING OIL 42L

Section 1: Identification of the Substance / Mixtur	re		
1.1 Product identifier			
Product name	Divyol Quenching Oil 42L		
Product description	Quenching Oil		
Product type	Industrial Oil		
MARPOL Annex-1	****		
1.2 Identified uses	1		
Distribution of substance	Industrial		
Formulation & (re)packing of substance & mixtures	Industrial		
Manufacture of substance	Industrial		
Functional fluids	Industrial		
Section 2: Hazard Identification			
4-Extreme	Health	1	
3-High	Flammability	1	
2-Moderate	Reactivity	0	
1-Slight	Special	-	
Section 3: Compostion / Information on Ingredier	nts		
Product / Ingredient name	CAS No.: Not applicable for blende Distillates (Petroleum) mixture of h		
Section 4: First Aid Measures			
Inhalation exposure	Remove to fresh air & provide oxyg	en, if breathing is difficult. Contact physician	
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.		
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.		
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.		
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.		
Section 5: Fire Fighting Measures			
5.1 Extinguishing media			
Unsuitable extinguishing media		ide. Do not use direct water and wet chemicals, or water on the the fire. Use foam simultaneously on the surface.	
5.2 Special hazards arising from the substance or mixtu	re		
Hazards from the substance or mixture	Flammable liquids in pressurised c flammable vapour cloud.	ontainers may rupture and when exposed to heat, creating a highly	
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.		
5.3 Advice for firefighters			
Special precautions for firefighters		oving all persons from the vicinity of the incident if there is a fire. No personal risk or without suitable training.	
Special protective equipment for firefighters	(SCBA) with a full face-piece opera	te protective equipment and self-contained breathing apparatus ted in positive pressure mode. Clothing for firefighters (including res) conforming to European standard EN 469 will provide a basic level rs.	





6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.		
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.		
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.		
6.3 Methods and material for containment and cleaning	up		
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.		
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.		
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.		
Section 7: Handling and Storage			
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.		
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.		
7.3 Specific end use(s) – Recommendations	Not available		





Section 8: Exposure Controls / Personal Protection	Section 8:	Exposure	Controls /	Personal	Protection
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	1 111 1/10		
The list of Identified Uses in Section 1	should be consulted for any	/ available use-specific information	provided in the Exposure Scenario(s).

8.1 Control parameters	
Occupational exposure limits Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	 AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -12°C (ASTM D-97)
Flash point	> 190 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available
Flammability limits in air (upper), % by volume	Not available
Vapour pressure	≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)
Density Solubility (ies)	0.88 max at 15 °C





		1				
Solubility (water)		Insoluble in water				
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data	No data			
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °	F)	22.85 cst (ASTN	1 D 445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn	e solid and liquid	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory						
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are				
		multigene or genotoxic. The base oil(s) in this product is based on an severely hydrotreated distillate.				
Carcinogenicity			· · · · · · · · · · · · · · · · · · ·			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure					
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation			I mist or vapours at elevated te		atory irritation.	
Skin contact		No known sign	ificant effects or critical hazard	S.		
Ingestion		May be fatal if s	wallowed and enters airways.			
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) i regarded as a c	n this product is based on an s arcinogen.	everely hydrotreated distillate	. The product should not be	







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known :	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Not expected to be harmful to aquatic organisms.				
12.1 Toxicity				dillSillS.		
12.2 Persistence and degradability		Not inherently biodegradable.				
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product. Not considered mobile.				
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste	ardous waste					
European waste catalogue (EWC) Waste Code 13 03 07*		Waste designation.				
Packaging	Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.			
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
					ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to Annex XIV	islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed					
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances,		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	ply with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
РВТ	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.				
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.			
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.			
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			





DIVYOL QUENCHING OIL 43

Section 1: Identification of the Substance / Mixtur	e					
1.1 Product identifier						
Product name	Divyol Quenching Oil 43					
Product description	Quenching Oil					
Product type	Industrial Oil					
MARPOL Annex-1	****					
1.2 Identified uses	1					
Distribution of substance	Industrial					
Formulation & (re)packing of substance & mixtures	Industrial					
Manufacture of substance	Industrial					
Functional fluids	Industrial					
Section 2: Hazard Identification						
4-Extreme	Health	1				
3-High	Flammability	1				
2-Moderate	Reactivity	0				
1-Slight	Special					
Section 3: Compostion / Information on Ingredier	•					
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.					
Section 4: First Aid Measures	·					
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician					
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuously with water for s	several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures	on 5: Fire Fighting Measures					
5.1 Extinguishing media						
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.					
5.2 Special hazards arising from the substance or mixtu	re					
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.					
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters						
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.					





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Flammability limits in air (lower), % by volume

Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	
	insulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptabl levels.
Section 9: Physical and Chemical Properties	s
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -6°C (ASTM D-97)
Flash point	> 200 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available

≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

Not available

0.88 max at 15 °C





Solubility (water)		Insoluble in wa	ter			
· · · · · · · · · · · · · · · · · · ·		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °	F)	30 cst (ASTM D	445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	nce(s) Not available				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ingr	edients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal o	conditions of storage and use, I	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials			nbustion is likely to give rise to ses, including carbon monoxic			
10.6 Hazardous decomposition	products		ganic and inorganic compound		r	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica						
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
rioduct/ingredient name		ts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LC 50 Inhalation dusts and mists		Rabbit	> 5000 mg/kg	4 110015	
treated heavy paraffinic	LD 50 Dermal LD 50 Oral		Rat	>15000 mg/kg	_	
	LD 30 018	ai	nat	>15000 mg/kg		
Irritation / corrosion						
Skin		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known sign	ificant effects or critical hazard	< c		
Respiratory		No known significant effects or critical hazards.				
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	in this product is based on an s	everely hydrotreated distillate		
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure					
Specific target organ toxicity – rep		Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exposure		Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
			Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
			ificant effects or critical hazard			
			wallowed and enters airways.			
Potential chronic health effects						
General		No known sign	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				
		5	5			





Mutagenicity						
Teratogenicity						
		No known :	significant effects or critical haz	ards.		
Fertility effects	5					
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Net over eat		1		
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability			ntly biodegradable.		ula ilita y affetta in yana duyat	
12.3 Bioaccumulative potential			ered mobile.	nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Where possible (e.g. in the absence of relevant contamination), recycling of used substance feasible and recommended. This substance can be burned or incinerated, subject to nation authorisations, relevant contamination limits, safety regulations and air quality legislation. or waste substance (not directly recyclable): Disposal can be carried out directly, or by deliv qualified waste handlers. National legislation may identify a specific organisation, and/or p composition limits and methods for recovery or disposal			subject to national/local iality legislation. Contaminated rectly, or by delivery to			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to authorisation Annex XIV		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes
Europe	European List of Notified Chemical Substances (ELINCS) – No
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes
Korea	Existing Chemicals List (ECL) – Yes
New Zealand	New Zealand Inventory – Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).
Section 16: Other Information	
Revision comments	
Legend to abbreviations	
ADR	European agreement concerning the international carriage of dangerous good by road.
RID	Regulations agreement concerning the international carriage of dangerous good by rail.
IMDG Code	International Maritime Dangerous Goods Code.
ICAO	International Civil Aviation Organization.
IATA	International Air Transport Association.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].
SCBA	Self-Contained Breathing Apparatus.
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].
LC 50	Median lethal concentration.
LD 50	Median lethal dose.
PBT	Persistent, Bio accumulative and Toxic.

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





DIVYOL QUENCHING OIL 43L

Section 1: Identification of the Substance / Mixtur	e					
1.1 Product identifier						
Product name	Divyol Quenching Oil 43L					
Product description	Quenching Oil					
Product type	Industrial Oil					
MARPOL Annex-1	****					
1.2 Identified uses	1					
Distribution of substance	Industrial					
Formulation & (re)packing of substance & mixtures	Industrial					
Manufacture of substance	Industrial					
Functional fluids	Industrial					
Section 2: Hazard Identification	<u> </u>					
4-Extreme	Health	1				
3-High	Flammability	1				
2-Moderate	Reactivity	0				
1-Slight	Special	-				
Section 3: Compostion / Information on Ingredier	nts					
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.					
Section 4: First Aid Measures						
Inhalation exposure	Remove to fresh air & provide oxyc	gen, if breathing is difficult. Contact physician				
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.					
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.					
Eye contact	Rinse continuously with water for	several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.					
Section 5: Fire Fighting Measures						
5.1 Extinguishing media						
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.					
5.2 Special hazards arising from the substance or mixture						
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.					
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H_2S , SO_x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.					
5.3 Advice for firefighters						
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.					
Special protective equipment for firefighters	(SCBA) with a full face- piece opera	te protective equipment and self-contained breathing apparatus ated in positive pressure mode. Clothing for firefighters (including ves) conforming to European standard EN 469 will provide a basic level ts.				





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Flammability limits in air (lower), % by volume

Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Prote	ection
The list of Identified Uses in Section 1 should be con	sulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	 AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m³ 8 hours. Form: mist and fume STEL: 3 mg/m³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -12°C (ASTM D-97)
Flash point	> 180 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available

≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

Not available

0.88 max at 15 °C





		1				
		Insoluble in water				
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °	F)	23.11 cst (ASTN	1 D 445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity availa	able for this product or its ing	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, h	nazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away fron	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxid	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica						
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
luuitestisus (seumestisus						
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin		No known sign	ificant effects or critical hazard	S.		
Respiratory		No data di 1			010/05-	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s		<u>.</u>	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure	Not class:6 - d				
Specific target organ toxicity – rep	peated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact Eye		Eye contact may cause redness and transient pain.				
		Inhalation of oi	l mist or vapours at elevated te	mperatures may cause respira	atory irritation.	
		ificant effects or critical hazard	s.			
		May be fatal if s	wallowed and enters airways.			
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity						
Teratogenicity						
		No known :	significant effects or critical haz	ards.		
Fertility effects	5					
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Net over eat		1		
12.1 Toxicity			Not expected to be harmful to aquatic organisms.			
12.2 Persistence and degradability			ntly biodegradable.		ula ilita y affetta in yana duyat	
12.3 Bioaccumulative potential			ered mobile.	nt because of the low water solu	ibility of this product.	
12.4 Mobility in soil						
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Where possible (e.g. in the absence of relevant contamination), recycling of used substance feasible and recommended. This substance can be burned or incinerated, subject to nation authorisations, relevant contamination limits, safety regulations and air quality legislation. or waste substance (not directly recyclable): Disposal can be carried out directly, or by deliv qualified waste handlers. National legislation may identify a specific organisation, and/or p composition limits and methods for recovery or disposal			subject to national/local iality legislation. Contaminated rectly, or by delivery to			
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to authorisation Annex XIV		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Substances of very high concern Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles		Not applicable				
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
PBT	Persistent, Bio accumulative and Toxic.			

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601	
Email	info@gandharoil.com	





DIVYOL QUENCHING OIL 44

Section 1: Identification of the Substance / Mixtur	e				
1.1 Product identifier					
Product name	Divyol Quenching Oil 44				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification	l				
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredier	its				
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.				
Section 4: First Aid Measures					
Inhalation exposure	Remove to fresh air & provide oxyg	jen, if breathing is difficult. Contact physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixtu	re				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			



Flammability limits in air (upper), % by volume

Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Protect	
	ulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measure and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents). European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperatur control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produ and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to accepta levels.
Section 9: Physical and Chemical Properties	
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -6°C (ASTM D-97)
Flash point	> 220 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Flammability limits in air (lower), % by volume	Not available



≤ 0,1 hPa (20 °C) (Mineral oil, ASTM D 5191) (CONCAWE, 2010)

Not available

0.88 max at 15 °C





Solubility (water)		Insoluble in wat	ter			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °	F)	40 cst (ASTM D	445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	related to reactivity available for this product or its ingredients.		
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	onditions of storage and use,	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con particulates, ga	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn de. H ₂ S, SO (sulphur oxides) or	e solid and liquid sulphuric acid and	
10.6 Hazardous decomposition	products		ganic and inorganic compound		P	
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica						
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Dermal		Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
luuitestisus (seumestisus		-				
Irritation / corrosion						
Skin						
Eye		No known significant effects or critical hazards.				
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory		No data availat	lo to indicato product en enco	omponente present avector de	an 0 1 % are	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity			n this product is based on an s			
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin		Not classified				
Specific target organ toxicity – rep	peated exposure	NUL CIASSINED				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact ma	contact may cause redness and transient pain.			
Inhalation		Inhalation of oil	ation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
			ificant effects or critical hazard	S.		
			y be fatal if swallowed and enters airways.			
Potential chronic health effects						
General		No known signi	ificant effects or critical hazard	s.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known :	significant effects or critical haz	ards.		
Fertility effects						
Other information Specific hazard		Not availab	ام			
Section 12: Ecological Information		Not availab				
		Net over eat		1		
12.1 Toxicity			ed to be harmful to aquatic org	dillSillS.		
12.2 Persistence and degradability			ntly biodegradable.		ula ilita y affetta in yana duyat	
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil			Not considered mobile.			
12.5 Results of PBT & vPvB assessment		Not applica		n water surfaces causing physic	al damage to expanience	
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	าร					
The information in this section contains information provided in the Exposure Sc		d guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific	
Product Methods of disposal	feasible and authorisatio or waste su qualified w	Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-ba	sed non-chlorinated insulating	and heat transmission oils.		
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		_	_	_	
14.3 Transport hazard class(es)	_		_	_	_	
14.4 Packing group	_		_	_	_	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		_	_	_	
14.6 Special processions for user all						
14.6 Special precautions for user oils		72/70 and th	a IRC Codo			
14.7 Transport in bulk according to An		, 3/ / 6 and th				
Section 15: Regulatory Informatio		elation and '	fe for the cubeter of any hit	a Ell Dogulation (EC) No. 1007		
Annex XIV – List of substances subject to Annex XIV – Substances of very high concern		islation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) None of the components are listed				
Annex XVII – Restrictions on the manufa	Not applicable					
on the market and use of certain danger mixtures and articles.	ous substances,					
	ous substances,	Inventory I				
mixtures and articles.	ous substances,			res (AICS) – Yes		
mixtures and articles. International Lists National Inventory	ous substances,	Australian I Domestic S	name nventory of Chemical Substanc ubstances List (DSL) – Yes			
mixtures and articles. International Lists National Inventory Australia		Australian I Domestic S Non-Dome	name nventory of Chemical Substanc)		





Former	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

Disclaimer: Information contained in this material data sheet is believed to be reliable, but no representation, guarantee or warranties of any kind made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the manufacturer / seller to ensure that the information content in the material data sheet is relevant to the product manufactured / handled or sold by, as the case may be. GANDHAR makes no warranties expressed or implied in respect of the adequacy of this document for any particular purpose.

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 Email
 info@gandharoil.com





DIVYOL QUENCHING OIL 45HL

Section 1: Identification of the Substance / Mixtur	e				
1.1 Product identifier					
Product name	Divyol Quenching Oil 45HL				
Product description	Quenching Oil				
Product type	Industrial Oil				
MARPOL Annex-1	****				
1.2 Identified uses					
Distribution of substance	Industrial				
Formulation & (re)packing of substance & mixtures	Industrial				
Manufacture of substance	Industrial				
Functional fluids	Industrial				
Section 2: Hazard Identification	·				
4-Extreme	Health	1			
3-High	Flammability	1			
2-Moderate	Reactivity	0			
1-Slight	Special	-			
Section 3: Compostion / Information on Ingredier	its				
Product / Ingredient name	CAS No.: Not applicable for blende Distillates (Petroleum) mixture of h				
Section 4: First Aid Measures	·				
Inhalation exposure	Remove to fresh air & provide oxyc	gen, if breathing is difficult. Contact physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.				
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.				
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.				
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.				
Section 5: Fire Fighting Measures					
5.1 Extinguishing media					
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.				
5.2 Special hazards arising from the substance or mixtu	re				
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.				
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.				
5.3 Advice for firefighters					
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.				
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.				





6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.			
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.			
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.			
6.3 Methods and material for containment and cleaning	up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.			
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.			
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.			
Section 7: Handling and Storage				
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.			
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.			
7.3 Specific end use(s) – Recommendations	Not available			

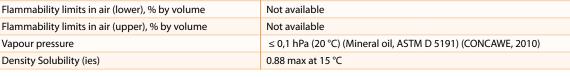


Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	otection
The list of Identified Uses in Section 1 should be co	onsulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for comparison with limit values furopean Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.
Section 9: Physical and Chemical Propertie	IS
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
pH	Not applicable
Pour point	< -12°C (ASTM D-97)
Flash point	> 190 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available









		1				
Solubility (water)			Insoluble in water			
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °F)		23.34 cst (ASTM	1 D 445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ing	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid			n extreme heat and oxidising a			
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Oral		Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory			la sa indiansa musuku sa su		0.1.0/ 2/2	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<u>.</u>	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure	Not classified				
Specific target organ toxicity – rep	peated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exp	oosure	Not available				
Potential acute health effects						
Eye contact		Eye contact may	e contact may cause redness and transient pain.			
Inhalation		Inhalation of oil	alation of oil mist or vapours at elevated temperatures may cause respiratory irritation.			
Skin contact		-	wn significant effects or critical hazards.			
		-	lay be fatal if swallowed and enters airways.			
Potential chronic health effects			,			
General		No known signi	ificant effects or critical hazard	S.		
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity						
Teratogenicity						
Product / ingredient name		No known s	No known significant effects or critical hazards.			
Fertility effects						
Other information Specific hazard		Not availab	le			
Section 12: Ecological Information		Not uvulub				
12.1 Toxicity	l	Not expect	ed to be harmful to aquatic org	anisms		
12.2 Persistence and degradability						
12.3 Bioaccumulative potential		Not inherently biodegradable. Bioaccumulation is unlikely to be significant because of the low water solubility of this product.				
12.4 Mobility in soil		Not considered mobile.				
12.5 Results of PBT & vPvB assessment		Not considered mobile. Not applicable				
12.6 Other adverse effects		Insoluble in		n water surfaces causing physic	al damage to organisms.	
Section 13: Disposal Consideration	15	oxygen da				
The information in this section contains		l quidance T	he list of Identified Lises in Sect	ion 1 should be consulted for a	ny available use-specific	
information provided in the Exposure Sc		-				
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal				
Hazardous waste		Yes				
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.				
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.				
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.				
Section 14: Transport Information						
International transport regulations						
	ADR / R	ID	ADN	IMO / IMDG Classification	ICAO / IATA Classification	
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated	
14.2 UN proper shipping name	_		-	-	-	
14.3 Transport hazard class(es)	_		-	-	-	
14.4 Packing group	_		-	-	-	
14.5 Environmental hazards	No		No	No	No	
Additional Information	_		-	-	-	
14.6 Special precautions for user oils						
14.7 Transport in bulk according to An	nex I of MARPOL	73/78 and th	e IBC Code			
Section 15: Regulatory Informatio						
15.1 Safety, health and environmental		slation speci	fic for the substance or mixtur	e EU Regulation (EC) No. 1907/	(2006 (REACH)	
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed				
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable				
International Lists National Inventory		Inventory name				
Australia		Australian Inventory of Chemical Substances (AICS) – Yes				
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No				
China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
Crinia						





	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes			
Europe	European List of Notified Chemical Substances (ELINCS) – No			
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes			
Korea	Existing Chemicals List (ECL) – Yes			
New Zealand	New Zealand Inventory – Yes			
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes			
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes			
	oly with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).			
Section 16: Other Information				
Revision comments				
Legend to abbreviations				
ADR	European agreement concerning the international carriage of dangerous good by road.			
RID	Regulations agreement concerning the international carriage of dangerous good by rail.			
IMDG Code	International Maritime Dangerous Goods Code.			
ICAO	International Civil Aviation Organization.			
IATA	International Air Transport Association.			
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.			
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].			
SCBA	Self-Contained Breathing Apparatus.			
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].			
LC 50	Median lethal concentration.			
LD 50	Median lethal dose.			
РВТ	Persistent, Bio accumulative and Toxic.			

GANDHAR OIL REFINERY (INDIA) LTD.			
Taloja Plant	Plot No.10, MIDC, Main Road, Taloja, Taluka Panvel, District - Raigad 410208, India.		
Silvassa Plant	Plot No. 2, Survey No. 678/1/3, Village Naroli, Near Naroli Check Post, Silvassa, Dadra & Nagar Haveli, Union Territory 396230, India.		
Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601		
Email	info@gandharoil.com		





DIVYOL QUENCHING OIL MF

Section 1: Identification of the Substance / Mixture				
1.1 Product identifier				
Product name	Divyol Quenching Oil 45MF			
Product description	Quenching Oil			
Product type	Industrial Oil			
MARPOL Annex-1	****			
1.2 Identified uses				
Distribution of substance	Industrial			
Formulation & (re)packing of substance & mixtures	Industrial			
Manufacture of substance	Industrial			
Functional fluids	Industrial			
Section 2: Hazard Identification	·			
4-Extreme	Health	1		
3-High	Flammability	1		
2-Moderate	Reactivity	0		
1-Slight	Special	-		
Section 3: Compostion / Information on Ingredier	its			
Product / Ingredient name	CAS No.: Not applicable for blended product. Distillates (Petroleum) mixture of hydro-treated hydrocarbons.			
Section 4: First Aid Measures	·			
Inhalation exposure	Remove to fresh air & provide oxygen, if breathing is difficult. Contact physician			
Skin contact	Remove contaminated clothing. Flush skin with water. Wash skin thoroughly with mild soap & water. If irritation occurs, call a physician.			
Swallowing or other	Do not induce vomiting. In general no treatment is necessary unless large quantities are ingested. Get medical advice.			
Eye contact	Rinse continuously with water for several minutes. Get medical attention, if irritation persists.			
Protection first-aiders	Disconnecting electrical supply. Ensure adequate ventilation and check that a safe and breathing area is available before entry into confined spaces.			
Section 5: Fire Fighting Measures				
5.1 Extinguishing media				
Unsuitable extinguishing media	Use dry powder, foam, carbon dioxide. Do not use direct water and wet chemicals, or water on the burning product. They may spread the fire. Use foam simultaneously on the surface.			
5.2 Special hazards arising from the substance or mixtu	re			
Hazards from the substance or mixture	Flammable liquids in pressurised containers may rupture and when exposed to heat, creating a highly flammable vapour cloud.			
Hazardous thermal decomposition products	Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H ₂ S, SO _x (sulphur oxides) or sulphuric acid and unidentified organic and inorganic compounds.			
5.3 Advice for firefighters				
Special precautions for firefighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.			
Special protective equipment for firefighters	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face- piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.			





6.1 Personal precautions, protective equipment and emergency procedures			
For non-emergency personnel	Keep non-involved personnel away from the area of spillage. Alert emergency personnel. Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind / keep distance from source. In case of large spillages, alert occupants in downwind areas. Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations. Note : Recommended measures are based on the most likely spillage scenarios for this material; however, local conditions (wind, air temperature, wave / current direction and speed) may significantly influence the choice of appropriate actions.		
For emergency responders	For this reason, local experts should be consulted when necessary. Local regulations may also prescribe or limit actions to be taken. Small spillages: Normal antistatic working clothes are usually adequate. Large spillages: Full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. Note: Gloves made of PVA are not water-resistant, and are not suitable for emergency use. Safety helmet, antistatic non-skid safety shoes or boots. Goggles and / or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory Protection : A half or full-face respirator with filter(s) for organic vapours (and when applicable for H ₂ S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.		
6.2 Environmental precautions	Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials. In case of soil contamination, remove contaminated soil and treat in accordance with local regulations. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.		
6.3 Methods and material for containment and cleaning up			
Small spill	Stop leak if without risk. Absorb spilled product with suitable non-combustible materials.		
Large spill	Large spillages may be cautiously covered with foam, if available, to limit vapour cloud formation. Do not use water jet. When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal.		
6.4 Reference to other sections	See Section 1: For emergency contact information. See Section 8: For information on appropriate personal protective equipment. See Section 13: For additional waste treatment information.		
Section 7: Handling and Storage			
7.1 Advice on general information – hygiene, storage	Obtain special instructions before use. Keep away from heat / sparks / open flames/hot surfaces. No smoking. Use and store only outdoors or in a well-ventilated area. Hazard of slipping on spilt product. Avoid release to the environment.		
7.2 Conditions for safe storage including any incompatibilities	Storage area layout, tank design, equipment and operating procedures must comply with the relevant regional, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations. Store separately from oxidising agents. Keep only in the original container or in a suitable container for this kind of product. Keep container tightly closed and sealed until ready for use. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Empty containers may contain harmful, flammable / combustible or explosive residue or vapours. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards. Protect from sunlight.		
7.3 Specific end use(s) – Recommendations	Not available		

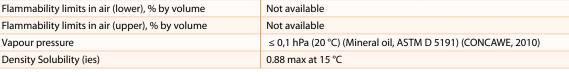


Vapour pressure

Density Solubility (ies)



Section 8: Exposure Controls / Personal Pro	tection
-	nsulted for any available use-specific information provided in the Exposure Scenario(s).
8.1 Control parameters	
Occupational exposure limits	
Product / Ingredient name	Distillates, mixture of hydrocarbons
Exposure limits values	AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume [Air contaminant]. AFS 2015:7 (Sweden, 12/2015). TWA: 1 mg/m ³ 8 hours. Form: mist and fume STEL: 3 mg/m ³ 15 minutes. Form: mist and fume.
Recommended monitoring procedures	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical agents for comparison with limit splues furopean Standard EN 482 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
8.2 Exposure control Appropriate engineering controls	Mechanical ventilation and local exhaust will reduce exposure via the air. Use oil resistant material in construction of handling equipment. Store under recommended conditions and if heated, temperature control equipment should be used to avoid overheating.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location. Wash contaminated clothing before reuse.
Eye / face protection	Recommended: Safety glasses with side shields.
Skin protection	
Hand protection	4 – 8 hours (breakthrough time): nitrile rubber.
Body protection	Wear protective clothing if there is a risk of skin contact. Change contaminated clothes at the end of working shift.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the produc and the safe working limits of the selected respirator. Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
Environmental exposure control	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptab levels.
Section 9: Physical and Chemical Properties	s
Appearance	Clear
Physical state	Liquid
Colour	Yellow
Odor	Petroleum odor
Odour threshold	Not available
рН	Not applicable
Pour point	< -9°C (ASTM D-97)
Flash point	> 180 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available









		1				
Solubility (water)		Insoluble in water				
Partition coefficient (n-octanol/water)		Not available				
Decomposition temperature		No data				
Auto-ignition temperature		>300 °C				
Kinematic viscosity at 40 °C (104 °	F)	14-18 cst (ASTN	14-18 cst (ASTM D 445) (Typical Value)			
Explosive properties		No data				
Oxidising properties		No data				
DMSO extractable compounds for according to IP346	r base oil substance(s)	Not available <3 %				
Section 10: Stability and Rea	ctivity					
10.1 Reactivity		No specific test	data related to reactivity avail	able for this product or its ing	redients.	
10.2 Chemical stability		Stable under no	ormal conditions			
10.3 Possibility of hazardous rea	octions	Under normal c	conditions of storage and use, I	hazardous reactions will not o	ccur. Oxidising agent.	
10.4 Conditions to avoid		Keep away from	n extreme heat and oxidising a	gents.		
10.5 Incompatible materials		Incomplete con	nbustion is likely to give rise to ses, including carbon monoxic	a complex mixture of airborn le. H.S. SO (sulphur oxides) or	e solid and liquid	
10.6 Hazardous decomposition	products		ganic and inorganic compound			
SECTION 11: Toxicological In	formation					
11.1 Information on toxicologica	al effects					
Acute toxicity						
Product / ingredient name	Result		Species	Dose	Exposure	
	LC 50 Inhalation due	sts and mists	Rat	>2.18mg/l	4 hours	
Distillate (Petroleum), hydro	LD 50 Derr	mal	Rabbit	> 5000 mg/kg	_	
treated heavy paraffinic	LD 50 Or	al	Rat	>15000 mg/kg	_	
Irritation / corrosion						
Skin						
		No known significant effects or critical hazards.				
Eye						
Respiratory						
Sensation						
Skin		No known significant effects or critical hazards.				
Respiratory		N. 1 11	1 II . II .		0.1.0/	
Mutagenicity		No data available to indicate product or any components present greater than 0.1 % are multigene or genotoxic.				
Carcinogenicity		The base oil(s) i	n this product is based on an s	everely hydrotreated distillate	<u>.</u>	
Reproductive toxicity		The product should not be regarded as a carcinogen. Contains no ingredient listed as toxic to reproduction.				
Specific target organ toxicity – sin	gle exposure	Net de - C - J				
Specific target organ toxicity – rep	peated exposure	Not classified				
Aspiration hazard		Aspiration hazard – Category 1				
Information on likely routes of exposure		Not available				
Potential acute health effects						
Eye contact		Eye contact may cause redness and transient pain.				
Inhalation		Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation.				
Skin contact		No known significant effects or critical hazards.				
Ingestion		May be fatal if swallowed and enters airways.				
Potential chronic health effects						
General		No known significant effects or critical hazards.				
Carcinogenicity		The base oil(s) in this product is based on an severely hydrotreated distillate. The product should not be regarded as a carcinogen.				







Mutagenicity							
Teratogenicity							
Product / ingredient name		No known s	No known significant effects or critical hazards.				
Fertility effects							
Other information Specific hazard		Not availab					
Section 12: Ecological Information		Not availab					
		Notovport	ad to be bermful to equatic are	anieme			
12.1 Toxicity			ed to be harmful to aquatic org				
12.2 Persistence and degradability			ntly biodegradable.		ula ilita yang du at		
12.3 Bioaccumulative potential		Bioaccumulation is unlikely to be significant because of the low water solubility of this product.					
12.4 Mobility in soil		Not considered mobile.					
12.5 Results of PBT & vPvB assessment		Not applica		a watar curfaces causing physic	al damage to expanience		
12.6 Other adverse effects			nsfer could also be impaired.	n water surfaces causing physica	al damage to organisms.		
Section 13: Disposal Consideration	าร						
The information in this section contains information provided in the Exposure Sc		l guidance. T	he list of Identified Uses in Sect	ion 1 should be consulted for ar	ny available use-specific		
Product Methods of disposal		Where possible (e.g. in the absence of relevant contamination), recycling of used substance is feasible and recommended. This substance can be burned or incinerated, subject to national/local authorisations, relevant contamination limits, safety regulations and air quality legislation. Contaminated or waste substance (not directly recyclable): Disposal can be carried out directly, or by delivery to qualified waste handlers. National legislation may identify a specific organisation, and/or prescribe composition limits and methods for recovery or disposal					
Hazardous waste		Yes					
European waste catalogue (EWC) Waste	Code 13 03 07*	Waste designation.					
Packaging		Mineral-based non-chlorinated insulating and heat transmission oils.					
Methods of disposal		The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.					
Section 14: Transport Information							
International transport regulations							
	ADR / R	ADR / RID ADN IMO / IMD			ICAO / IATA Classification		
14.1 UN number	Not regul	ated	Not regulated	Not regulated	Not regulated		
14.2 UN proper shipping name	_		_	_	-		
14.3 Transport hazard class(es)	_		_	_	_		
14.4 Packing group	_		_	_	_		
14.5 Environmental hazards	No		No	No	No		
Additional Information	_		_	_	_		
14.6 Special precautions for user oils		2/70 cm-14					
14.7 Transport in bulk according to An		5/78 and th					
Section 15: Regulatory Informatio			Ge familie and at				
15.1 Safety, health and environmental		siation speci	nc for the substance or mixtur	e EU Regulation (EC) No. 1907/	2006 (REACH)		
Annex XIV – List of substances subject to authorisation Annex XIV Substances of very high concern		None of the components are listed					
Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.		Not applicable					
International Lists National Inventory		Inventory name					
Australia		Australian Inventory of Chemical Substances (AICS) – Yes					
Canada		Domestic Substances List (DSL) – Yes Non-Domestic Substances List (NDSL) – No					
China	China		Inventory of Existing Chemical Substances in China (IECSC) – Yes				
China Ir			Existing Chemical Substances	(IECSC) = 10S			







_	European Inventory of Existing Commercial Chemical Substances (EINECS) – Yes	
Europe	European List of Notified Chemical Substances (ELINCS) – No	
Japan	Inventory of Existing and New Chemical Substances (ENCS) – Yes	
Korea	Existing Chemicals List (ECL) – Yes	
New Zealand	New Zealand Inventory – Yes	
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS) – Yes	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory – Yes	
	ply with the inventory requirements administered by the governing country(s) uct are not listed or exempt from listing on the inventory administered by the governing country(s).	
Section 16: Other Information		
Revision comments		
Legend to abbreviations		
ADR	European agreement concerning the international carriage of dangerous good by road.	
RID	Regulations agreement concerning the international carriage of dangerous good by rail.	
IMDG Code	International Maritime Dangerous Goods Code.	
ICAO	International Civil Aviation Organization.	
IATA	International Air Transport Association.	
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.	
CLP	Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008].	
SCBA	Self-Contained Breathing Apparatus.	
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006].	
LC 50	Median lethal concentration.	
LD 50	Median lethal dose.	
РВТ	Persistent, Bio accumulative and Toxic.	

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Emergency / Info Phone No.	Phone: +91-22-40635600 • Fax: +91-22-40635601			
Email	info@gandharoil.com			



Gandhar Oil Refinery (India) Limited

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, GMP Certified, NABL Accreditation and Government Recognized Three Start Export House

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Plants

Taloja | Silvassa | Sharjah