### MATERIAL SAFETY DATA SHEET

# according to Regulation (EC) No. 1907/2006 DYNATRANS MM

lssue:01

Version of : 2012-02-13 Revision date : None

t name :	1.1. Product identifier Product name : Chemical Name : Synonyms: C.A.S. No.:	Mixture
CalName:       District         yms:       Hydrocarbons         No::       -         emNo::       -         elevant identified uses of the substance or instare and uses advised against       -         et application :       UTTO - Transmission fluid.         tails of the supplier of the safety data sheet       UTTO - Transmission fluid.         ier :       TOTAL OIL INDIA PVT. LTD., Lubricants Division         The Leela Galleria, 3rd Floor       Andheri Kurla Road         Andheri Kurla Road       Andheri Kurla Road         Andheri East, Mumbai 400 059       India         ency telephones :       + 91 02266407700         + 91 02266407720       + 91 02266407720         zeparation is non-dangerous in accordance with Directive 1999/45/EC       ification         ol(s)       Not Classified         ification       Important Hazards	ChemicalName : Synonyms: C.A.S. No.:	Mixture
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way produce an allergic reaction.	Fax : 2. HAZARDS IDENTIFICATION The preparation is non-dangerous Classification	+ 91 02266407720
onmental effects : Should not be released into the environment.	Fax : 2. HAZARDS IDENTIFICATION The preparation is non-dangerous Classification Symbol(s) Classification Most Important Hazards	+ 91 02266407720
al-Chemical hazards : Contaminated surfaces will be extremely slippery.	Fax : 2. HAZARDS IDENTIFICATION The preparation is non-dangerous Classification Symbol(s) Classification	+ 91 02266407720 n accordance with Directive 1999/45/EC Not Classified May produce an allergic reaction.
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Petroleum-derived severely refined mineral-base product

Substances contributing to hazards :

in which the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) content, measured by IP 346, is less than 3% for the polycyclic aromatic hydrocarbons (PCA or PAH) contePetroleum distillate hydro treated CAS 64742-46-7 (Xn-R65)... max 18%

Impurities contributing to hazards : None to our knowledge

- impunites contin	Juling to nazarus .		None to our knowledg	e		-
Chemical Name	EC No.	REACH registration no.	CAS-No	Weight %	Classification (Dir. 67/548)	Classification (Reg. 1272/2008)
Long chain alkyl succinimide		no data available		<4.5	Xi;R38 N;R51-53	

Additional information

Product containing mineral oil with less than 3% DMSO extract as measured by IP346

For the full text of the R-phrases mentioned in this Section, see Section 16

4. FIRST AID MEASURES	
General advice :	IN CASE OF SERIOUS MANIFESTATIONS, CALL IN A DOCTOR OR EMERGENCY MEDICAL CARE
Route of exposure :	
Inhalation	Move to fresh air. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Skin contact :	Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. May cause an allergic skin reaction.
	Immediately remove all soiled or stained clothing
	Wash the affected area immediately and repeatedly soap and water
Eye contact :	Rinse immediately with plenty of water and seek medical advice.
Ingestion :	lf swallowed, do not induce vomiting - seek medical advice. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Notes to physician :	Treat symptomatically
5. FIRE-FIGHTING MEASURES	
FlashPoint:	See section 9
Extinguishing media:	- suitable :
	Foam. Carbon dioxide (CO2). ABC powder.
Extinguishing media which shall not	Do not use a solid water stream as it may scatter and spread fire.

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be used for sal Specific hazard			Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled.
Fire-fighter pro Other informati			Wear self-contained Cool containers/tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
6. ACCIDENT	AL RELEASE MEASU autions	IRES	Ensure adequate ventilation. Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. For personal protection see section 8.
Environmenta	l precautions		Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.
Methods for c	leaning up		Dam up. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.
(*) Also refer s	ection 8 and 13		
7. HANDLING	AND STORAGE		
7.1 HANDLING Advice on safe	_		Use only in well-ventilated areas. When using, do not eat, drink or smoke. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. For personal protection see section 8.
7.2 STORAGE Technical measu	ires:		Keep away from food, drink and animal feeding stuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Donot remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture.
Materials to Av Specific use(s)			Strong oxidizing agents
Exposure limits	E CONTROLS/PERSO <u>s</u> /m3, for 15 minutes oil Sensitizer		
**	Hard designation	C:	Carcinogen
M:	Mutagen	R:	
BIOLOGICAL S Exposure contr Occupational E			
Engineering M	easures		Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
Hygiene measu	res		Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Use personal protective equipment as required. Wash hands before breaks and at the end of workday. Regular cleaning of equipment, work area and clothing is recommended. Do not use abrasives, solvents or fuels Avoid breathing vapors, mist or gas Avoid extended and repeated contact with the skin as this may cause skin conditions, which may also be aggravated by minor injuries or by contact with soiled clothing. Avoid prolonged and repeated contact with the skin, especially with used or waste product. Do not dry hands with rags that have been contaminated with product Do not put product contaminated rags into work wear pockets.
Personal Prote GeneralInforma	ective Equipment ation		These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.
Respiratory pro	otection		When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 141). The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses
Eye Protection Skin and body			If splashes are likely to occur, wear: Safety glasses with side-shields Protective gloves, Long sleeved clothing, Protective shoes or boots.
Hand Protectio	n		Hydrocarbon-proof gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts,
			abrasion if used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves

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				r drains, water courses or the soil.	
				ES	
9. PHYSICAL AND CHEMICAL PRO Color	OPERTIES (				
Physical State @20°C		Yellowtoamber			
Odor		Liquid Characteristic			
Property	<u>Values</u>		Remarks	Method	
pН		N	o information available		
Boiling point/boiling range			Not applicable		
Flash point			> 210 c	Cleveland Open Cup (COC)	
			> 410 F	Cleveland Open Cup (COC)	
Evaporation rate		N	o information available		
Flammability Limits in Air		N	lo information available		
Vapor Pressure @ 20° C		N	lo information available		
Vapor density					
Density		0.876	@ 20 °C	ASTM D052	
Water solubility			Not applicable		
Solubility in other solvents		N	o information available		
logPow			o information available		
Auto ignition temperature		IN IN	> 250 C		
			> 250 C > 482 F		
Viacopity kinemotie			> 482 F		
Viscosity, kinematic		10.4cSt	@ 100°C	ASTM D445	
Explosive properties		Not explosive			
OxidizingProperties		Notapplicable			
Possibility of hazardous reactions		Notapplicable			
9.2. Other information					
10. STABILITY AND REACTIVITY					
Stability :		The product is stal	ble at normal storage, h	andling and use temperatures.	
Conditions to avoid :		Heat (temperatures	above flash point), sparks	, ignition points, flames, static	
		electricity			
Materials to avoid :		Avoid contact with	strong oxidizing		
Hazardous decomp. products :		Incomplete combustion and thermolysis produce more or less toxic gases such as CO, CO2, various hydrocarbons, aldehydes and soot.			
Hazardous Reactions				s and soot.	
hazardous Reactions		None under norma	a processing.		
11. TOXICOLOGICAL INFORMATIO	ON				
11.1. Information on toxicological e					
Acute toxicity - Product Information					
- Inhalation		Inhalation of vapor	rs in high concentration	may cause irritation of respiratory s	vstem.
		initiation of tapo			Jotom
- Ingestion		Indestion may cau	se gastrointestinal irrita	tion, nausea, vomiting and diarrhea	
Acute toxicity Component Informa	tion		3000 000000000000000000000000000000		
tate toxicity component morma					
Sub chronic toxicity					
No information available CHRONIC TOXICITY OR LONG-TERM					
	1	ALC 1 100 1			
Sensitization		Not classified as a se	ensitizer. Contains sensitiz	er(s). May produce an allergic reaction	
CMR Effects					
CIVIN EITEUS					
CMIX Ellects					

Ecotoxicity Acute aquatic toxicity Product Information Acute aquatic toxicity Component Information

# Acute aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicityto daphnia and other aquatic invertebrate	Toxicity to fish	Toxicity to microorgan isms
none				

Chronic aquatic toxicity Product Information

#### Chronic aquatic toxicity Component Information

#### Effects on terrestrial organisms

12.2. Persistence and degradability	
Persistence and degradability	No information available
12.3. Bio accumulative potential	
Product Information	
Partition coefficient: n-octanol/water	No information available
Component Information	
12.4. Mobility in soil	
Soil :	Given its physical and chemical characteristics, the product generally shows low soil mobility.
- Air :	Loss by evaporation is limited.
- Water :	Insoluble. The product spreads on the surface of the water.
12.5. Results of PBT and vPvB assessment	
PBT and vPvB assessment	No information available
12.6. Other adverse effects	
General Information	No information available.

#### 13. DISPOSAL CONSIDERATIONS

Waste from Residues / Unused Products	Dispose of in accordance with the European Directives on waste and hazardous waste. After use, this oil must be sent to a used oil collection location. Incorrect disposal of used oil endangers the environment. Every mixture with foreign substances such as solvents, brake and cooling liquids is forbidden.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
EWC Waste Disposal No.	The following Waste Codes are only suggestions: 13 02 05
Other information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

#### 14. TRANSPORT INFORMATION

UN Number :	unregulated
Road(ADR)/Rail(RID)/River(ADNR)	Not restricted for transport
Marine (IMO-IMDG)	Not restricted for transport
Airline (ICAO / IATA)	Not restricted for transport

#### 15. REGULATORY INFORMATION

The preparation is non-dangerous in accordance with Directive 1999/45/EC. Labelling Symbol(s) R-phrase(s)

S-phrase(s) none Special labelling of certain preparations Contains Calcium sulfonate. May produce an allergic reaction. Further information International Inventories EINECS/ELINCS -TSCA -DSL -ENCS -IECSC -KECL -PICCS -AICS

# NZIOC -

Legend EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List ENCS - Japan Existing and New Chemical Substances IECSC - China Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals European Union Directive 1999/13/EC on the limitation of emissions of volatile organic compounds

## 16. OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3 R38 - Irritating to skin R43 - May cause sensitization by skin contact R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Disclaimer

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfilh is obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned

End of the safety data sheet