MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME SCOPE LUMIX GRADES SAE ALL

Product Use Heavy Duty Engine Oil ALL 5WXX, 15WXX, 20WXX GRADES

Uses advised against: No additional information available

Company Identification

United Grease and Lubricants Co LLC, PO Box 2685, Ajman, United Arab Emirates. Www.unitedgrease.com

Transportation Emergency Response(971)(54) 2171575

Health Emergency
(971)(54)2171575

Product Information
(971)(54)2171575

SECTION 2 HAZARDS IDENTIFICATION

Classification Not classified as hazardous according to 29 CFR 1910.1200 (2012)

Hazards Not Otherwise Classified Not applicable

EC Index No N/A EC No N/A CAS No N/A REACH Registration No N/A

SECTION 2 Label Elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP)

Hazard Pictograms (CLP)

CLP Signal word

Not applicable

Not applicable

Hazardous Ingredients and/or Contains: Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl

with relevant occupational and iso-Pr) esters, zinc salts

exposure limits

Hazardous Statements (CLP) Not applicable Precautionary statements (CLP) Not applicable

Not applicable
Not applicable
Not applicable
Not applicable

EUH Phrases EUH208 - Contains calcium sulphonate - may produce an allergetic

reaction

Other General Advice Use gloves when handling this product.

Dispose off packs properly

This substance/mixture does not meet the PBT criteria of REACH, Annex III This substance/mixture does not meet the vPvB criteria of REACH, Annex III

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS (MIXTURES AS PER EU DIRECTIVES)

Composition/information on ingredients Mineral base oil, severely refined

Additive

All mineral oils in this product has a DMSO extract of <3%

as per IP 346/92 (Dir 94/69/e - CE 1272/2008)

Hazardous ingredients and/or with See table

relevant occupational exposure limits -----

The substances identified as IMPURITY are impurities and/or secondary reaction products in the components, and are not added deliberately to the final product

Components/Name	Product Identifier	%	Classification according to 67/548/EEC
Mineral base oil, severely refined (main component)		90-99	Not classified

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Components/Name	Product Identifier	%	Classification according to 67/548/EEC
Phosphorodithioic acid, mixed o,o-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts (Additives)	CAS 84605-29-8 EC 283-392-8 EC Index No. N/A REACH No. 01211949362626	0.49 to 0.99	Xi: R41 Xi: R 38 N: R51/53
Reaction mass of isomers of C7-9 alkyl 3-(3,5 di-trans-butyl-4-hydroxyphenyl) propionate (Additive)	CAS 125643-61-0 EC 406-040-9 EC Index 607-530-00-7 REACH No. N/D		R53
Benzene, mono C-10-13 alkyl derivatives, fractionation bottoms, heavy ends, sulfonated, calcium salts (additive)	CAS 148520847 EC No. NA EC Index NA REACH No. N/D	0.19-0.249	R 43
Ethoxylated nonyphenol (additive) substance listed as REACH candidate (4-Nonylphenol) branched and linear, ethxylated)	CAS 9016 45 9 EC No. Polymer EC Index NA REACH No. N/D		Xn: R22 Xi: R41 N:R51/53
Alkylated diphenylamines (Additive)	CAS : N/a EC No. NA EC Index NA REACH No. N/D		R 53
Phenol, dodecyl-, branched, sulfurized (additive)	CAS 96152431 EC No. 3061155 EC Index NA REACH No. 01211949261628	0.19 to 0.249	R 53

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Components/Name	Product Identifier	%	Classification according to 67/548/EEC
	CAS 70024690	0.099 - 0.149	R 43
Benzenefulfonic acid, mono - C16-24 alkyl	EC No. 2742637		
derivs., calcium salts (Additive)	EC Index NA		
	REACH No. 01211949261628		
	CAS 121158585	0.099 - 0.149	Repr. Cat 3: R62
Dodecylphenol, mixed isomers, branched	EC No. 3101543		Xi: R36/38
(IMPURITY)	EC Index NA		N:R50/53
	REACH No. 01211951320749		

			Classification according to
Components/Name	Product Identifier %		Regulation (EC) No. 1272/2008 (CLP)
Mineral base oil, severely refined (main component)		95-99	Not classified
	CAS 84605-29-8	0.49-0.99	Skin Irrit. 2, H 315
Phosphorodithioic acid, mixed o,o-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts	EC 283-392-8		Eye Dam. 1, H 318
(Additives)	EC Index No. N/A REACH No.		Aquatic Chronic: 2, H441
	01211949362626		
	CAS 125643-61-0		Aquatic Chronic: 2, H413
Reaction mass of isomers of C7-9 alkyl 3-(3,5 di-trans-butyl-4-hydroxyphenyl) propionate	EC 406-040-9		
(Additive)	EC Index 607-530-00-7		
	REACH No. N/D		
	CAS 148520847	0.19-0.249	Skin Sens. 1, H 317
Benzene, mono C-10-13 alkyl derivatives, fractionation bottoms, heavy ends,	EC No. NA		
sulfonated, calcium salts (additive)	EC Index NA		
	REACH No. N/D		
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Components/Name	Product Identifier	%	Classification according to 67/548/EEC
	CAS 96152431	0.19-0.249	Aquatic Chronic: 2, H413
Phenol, dodecyl-, branched, sulfurized	EC No. 3061155		
(additive)	EC Index NA		
	REACH No. 01211949261628		
	CAS 70024690	0.099-0.149	Skin Sens. 1, H 317
Benzenefulfonic acid, mono - C16-24 alkyl	EC No. 2742637		
derivs., calcium salts (Additive)	EC Index NA		
	REACH No. 01211949261628		
	CAS 121158585		Skin Irrit. 2, H 315
Dedendah arah sebuah basu sa basu shad	EC No. 3101543		Eye Irrit. 2, H 319
Dodecylphenol, mixed isomers, branched (IMPURITY)	EC Index NA	0.099-0.149	Repr 2, H 316f
	REACH No.		Acuatic Acute 1, H 400
	01211951320749		Aquatic Chronic, 1, H 410

For full text of R-, H- and EUH Phrases: See section 16

SECTION 4 - FIRST AID MEASURES

Description of first aid measures (FAM)

General In case of spontaneous vomiting, transport the victim to a hospital, to verify the possibility

that the product has been aspired into the lungs.

After In case of disturbances owing to inhalation of vapours or mists, remove the victim from

inhalation exposure, keep at rest; if necessary seek medical attention, Also see point 4.3

Skin Take off contaminated clothing and shoes. Wash thoroughly with soap and water.

Contact If inflammation or irritation persists, seek medical advice. In case of contact with hot

product, cool affected part with plenty of cold water, and cover with guaze or clean cloth. Call a doctor orbring to a hospital. So not use salves or ointments, unless directed by the

doctor. Body hypothermia must be avoid. Do not put ice on the burn

Eye contact Rinse eyes thoroughly for at least 15 minutes. Keep eyelids well apart.

If irritation persists, seek medical advice. In case of contact with hot product, cool

affected part with plenty of cold water, and cover with gauze or clean cloth. Call a doctor or

bring to a hopsital. Do not use salves or ointments unless directred by the doctor

Ingestion Do not induce vomiting to avoid aspiration into the lungs. If the person is conscious, rinse

mouth with water without swallowing. Keep at rest. Call for medical assistance or bring to a hospital. If the casualty is inconscious, place in the recovery position. In case of spontaneous

vomiting, keep head low, to avoid the risk of aspiration into the lungs

Do not give anything by mouth to an unconscious person

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Most important symptoms and effects, both acute and delayed

Systems/Injuries after inhalation This product has a low vapour pressure, and in normal conditions at temperature the concentration in the air is negligible. A significant concentration may build up only if the product is used at high temperature, or in case of sprays and mists In these cases overexposure to vapours may cause irritation to airways, nausea and dizziness

Systems/Injuries after skin contact Prolonged and repeated skin contact may cause reddening, irritation and dermatitis. Contact with hot product may cause thermal burns.

Symptoms/injuries after ingestion Accidental ingestion of small quantities of the product may cause irritation, nausea and gastric disturbances. Taking into account the taste of the product, however, ingestion of dangerous quantites is very unlikely.

Symptoms/injuries upon intravenous administrationNo information available.

Chronic symptoms None to be reported, according to the present EU regulations.

Indication of any immediate medical attention and special treatment needed

If there is any suspicion of inhalation of H2S (hydrogen sulphide). The casualty should be sent immediately to hospital. Immediately begin artificial respiration if breathing has ceased. Administer oxygen if necessary. Seek medical attention in all cases of serious burns.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA Small-size fires: carbon dioxide, dry chemicals, foam, sand or earth. Large fires:

foam or water fog (mist). These means should be used by trained personnel

only. Other extinguishing gases (according to regulations)

UNSUITABLE Do not use water jets They could cause splattering, and spread the fire. **EXTINGUISHING** Simultaneous use of foam and water on the same surface is to avoided as

MEDIA water destroys the foam Special hazards arising from the substance or mixture

Fire Hazard This product is combustible, but not classified as Flammable. The creation of

flammable vapour mixtures takes place at temperatures which are higher than

normal ambient levels

Explosion Hazard In case of losses from pressurized circuits, the sprays may form mists. Take into

account that in this case the lower explosion limit for mists is about 45 g/m³ of

air

Combustion Products Incomplete combustion is likely to give rise to a complex mixture of airborne

solids and liquid particulates, gases, including carbon monoxide, NOx, H2S

and SOx,Oxygenated compounds (aldehydes, etc.),CaOx,ZnOx,POx.

Advice for firefighters

Firefighting instructions Shut off source of product, if possible. If possible, move containers and drums

away from danger area. Spilled product which is not burning should be covered with sand or foam. Use water sprays to cool containers and surfaces exposed

to the flames. If the fire cannot be controlled, evacuate area

Special protective equipment for firefighters Personal protection equipment for firefighters

(see also section 8) Self contained breathing apparatus

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Stop or contain leak at the source, if safe to do so. Eliminate all ignition sources if safe to do so (e.g. electricity, sparks, fires, flares). Avoid accidental sprays on hot surfaces or electrical contacts. Avoid direct contact with released material. Keep upwind.

For Non emergency Personnel

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Protective Equipment

See section 8

Emergency Procedures

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.

For Emergency Responders

Protective equipment

Small spillages: normal antistatic working clothes are usually adequate. Large spillages: full body suit of chemically resistant and antistatic material. if necessary heat resistant and insulated. Work gloves providing adequate chemical esistance, specifically to aromatic hydrocarbons. Gloves made of PVA are not water-resistant, and are not suitable for emergency use. If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated. Antistatic non skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated. Work helmet. 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 for organic vapours (and when applicable for H2S). 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.

Emergency Procedures

Notify local authorities according to relevant regulations.

Environmental precautions Do not let the product accumulate in confined or underground spaces. Do not let the product flow into sewers or water courses, or in any way contaminate the environment. In case of contamination of environment compartments (soil, subsoil, surface or underground waters), remove contaminated soil when possible, and in any case treat all involved compartments in accordance with local regulations. The site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

Methods and material for containment and cleaning up

Soil. Contain spilled liquid with sand, earth or other suitable absorbents (nonflammable). Recover free liquid and waste materials in suitable waterproof and oil resistant containers. Clean contaminated area. Dispose of according to local regulations. Water: Confine the spillage. Remove from surface by skimming or suitable floating absorbents. Collect recovered product and other waste materials in suitable waterproof, oil resistant containers. Recover or dispose of according to local regulations.

Other Information

Do not use solvents or dispersants, unless specifically advised by an expert, and, if required, approved by local authorities. 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. Local regulations may also prescribe or limit actions to be taken. For this reason, local experts should be consulted when necessary.

Reference to other sections

Refer to chapter 16

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SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Ensure that all relevant regulations regarding handling and storage facilities of flammable products are followed. Do not use compressed air for filling, discharging, or handling operations. Keep away from heat/sparks/ open flames/hot surfaces. Use and store only outdoors or in a well-ventilated area. During transfer and mixing operations, ensure that all equipment is correctly grounded. Avoid the build-up of electric charges. Emptied containers can contain combustible product residues. Do not cut, weld, drill, burn or incinerate empty containers or drums, unless they have been drained and cleaned. Before entering storage tanks and commencing any operation in a confined area (e.g. tunnels), carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds. See also Section 16, "Other information".

Hygeine Measures

Avoid contact with skin. Do not breathe fume/ mist/ vapours. Do not ingest. Do not smoke. Do not eat and do not drink during use. Do not clean hands with dirty or oil soaked rags. Do not re-use clothes, if they are still contaminated. Keep away from food and beverage

Avoid contaminating soil or releasing this material into sewage and drainage

General Handling

Information systems and bodies of water Keep out of reach of children

Precautionary Measures

Static Hazard

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vaccum truck operations) and use appropriate mitigating procedures

Container Warnings

Container is not designed to contain pressures. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid and/or vapour) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed off properly

0 to 55 deg C

Handling Temperature

0 to 65 deg C Storage temperaure Conditions for safe storage, including any incompatibilities

Stoage conditions Store in dry, well ventilated area. Keep away from open flames, hot

surfaces and sources of ignition. Do not smoke.

Incompatible Products

Keep away from Strong Anti Oxidants

Storage area

Storage area layout, tank design, equipment and operating procedures must comply with the local legislation. Storage installations should be designed with adequate bunds so as to prevent ground and water pollution 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.

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Package and Containers If the product is supplied in containers: Keep containers tightly closed and

properly labelled. Keep only in the original container or in a suitable container

for this kind of product

Packaging Materials For containers, or container linings use materials specifically approved

for use with this product. Recommended materials for containers, or container

linings use mild steel, stainless steel. Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the

manufacturer.

Specific End Uses No information available

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS

Consider the potential hazards of this material (See Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

ENGINEERING CONTROLS

Use in a well ventilated area. Check levels of O2, flammability and Sulfur before entering confined area **PERSONAL PROTECTIVE EQUIPMENT**

Eye/Face Protection Face shie/d/Safety glasses is normally promoted. Where splashing is possible,

wear safety glasses with side shields as a good safety practice

Skin Protection No special protective clothing is normally required. Where splashing is possible,

select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials

for protective gloves include:

4H (PE/EVAL), Nitrile rubber, Silver shield, Viton

Respiratory No respiratory protection is normally required

Protection If user operations generate an oil mist, determine if airborne concentrations are

below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators, use a particulate

cartridge

Use a positive presure air-supplying respirator in circumstances where air

purifying respirators may not provide adequate protection

Occupational Exposure Limits:

Component	Agency	Form	TWA	STEL	Ceiling	Notation
Mineral Oil, severly refined	ACGIH		5 mg/m3	10 mg/m3		
Distillates, hydrotreated heavy paraffinic	OSHA Z-1	Mist	5 mg/m3			

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Component	Agency	Form	TWA	STEL	Ceiling	Notation					
Distillates,											
hydrotreated heavy	OSHA Z-1		5 mg/m3								
paraffinic											
Distillates,	Most of										
hydrotreated heavy	Europe	Mist	5-10 mg/m3								
paraffinic, DMSO <3%	•										
Mineral base oil, severly refined											
DNEL/DMEL (workers)	=5.4 mg/m3/day (DNEL - mineral oil mist- severly										
Long term - systemic ef	fects, inhalatio	on	=5.4 mg/m	refined, DMS		st- severiy					
DNEL/DMEL (General P	opulation)										
Long term - systemic ef	fects, inhalatio	on	=1.2 mg/m	- 13/day (DNEL) refined, DMS	mineral oil mi O < 3 % m/m	st- severly					
Phosphorodithioc acid,	, mixed O,O-bi	s(1,3 dimeth	ylbutyl and iso-	Pr) esters, zinc	c salts (84605-	29-8)					
DNEL/DMEL (workers)											
Long Term - systemic et	ffects, dermal		12.1 mg/kg of	body weight/o	day						
Long term - systemic ef	fects, inhalatio	n	8.31 mg/m3								
DNEL/DMEL (General P	opulation)		•								
Long Term - systemic et	ffects, Oral		0,24 mg/kg bo	dyweight/day		_					
Long Term - systemic et	ffects, Inhalati	on	2.11 mg/m3								
Long Term - systemic et	ffects, dermal		6.1 mg/kg of body weight/day								
PNEC (Water)											
PNEC aqua (freshwater)		0.004 mg/l								
PNEC aqua (Marine wat	ter)		0.0046 mg/l								
PNEC aqua (intermitter	nt, fresh water		2.5 mg/l								
PNEC (SOIL)											
PNEC Soil			0.0548 mg/kg	DWT							
Phenol, dodcyl-, brand	ed, sulfurized	(96152-43-1)									
DNEL/DMEL (workers)											
Acute - systemic effects			80 mg/kg of b	ody weight/da	У						
Acute - systemic effects			6.68 mg/m3								
Long term- systemic eff			1.04 mg/kg of body weight/day								
Long term - systemic ef		n	3.526 mg/m3(DNEL)								
DNEL/DMEL (General P											
Acute - systemic effects			40 mg/kg bod		•						
Acute - systemic effects			66,8 mg/m³ (DNEL)								
Acute - systemic effects	-		25 mg/kg bod		•						
Long term- systemic eff			0,25 mg/kg bo		(DNEL)						
Long term - systemic ef		n	0,87 mg/m³ (DNEL)								
Long term - systemic ef	fects, dermal		0,52 mg/kg bo	dyweight/day	(DNEL						
PNEC (Water)			_								
PNEC aqua (freshwater	•		0.25 mg/l								
PNEC aqua (Marine wat			0.024 mg/l								
PNEC (Aqua) Intermitte	nt		2,5 mg/l								

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PNEC (Sediment)	
PNEC Sediment (fresh water)	545,4 mg/kg dwt
PNEC Sediment (Marine water)	54,54 mg/kg dwt
PNEC (SOIL)	
PNEC Soil	441 mg/kg dwt
PNEC (Oral)	
PNEC Oral (secondary poisoning)	6670 mg/kg food
PNEC (STP)	
PNEC Sewage Treatment Plant	6,5 mg/l

Benzenesulfonic acid, mono-C16-C24 alkyl derivs, calcium salts (70024-69-0)					
DNEL/DMEL (workers)					
Long term, local effects, dermal	1.03 mg/cm2				
Long term- systemic effecs, dermal	3.33 mg/kg of body weight/day				
Long term - systemic effects, inhalation	11.75 mg/m3				
DNEL/DMEL (General Population)					
Long term, local effects, dermal	0.513 mg/cm2				
Long term- systemic effecs, dermal	1.667 mg/kg of body weight/day				
Long term - systemic effects, inhalation	2.9 mg/m3				
Long term - systemic effects, Oral	0.8333 mg/kg bodyweight/day (DNEL				
PNEC (Water)					
PNEC aqua (freshwater)	1 mg/l				
PNEC aqua (Marine water)	1 mg/l				
PNEC aqua (intermittent, freshwater)	10 mg/l				
PNEC (Sediment)					
PNEC Sediment (fresh water)	545.4 mg/kg DWT				
PNEC Sediment (Marine water)	54.54 mg/kg DWT				
PNEC (Oral)					
PNEC Oral (secondary poisoning)	16667 mg/kg food				
PNEC (STP)					
PNEC Sewage Treatment Plant	1000 mg/l				

Benzene,mono-C10-13-alkyl derivs.,fraction bottoms,heavy ends,sulfonated,calcium salts (148520847) DNEL/DMEL (workers)

1.03 mg/cm2
3.33 mg/kg of body weight/day
11.75 mg/m3
0.513 mg/cm2
1.667 mg/kg of body weight/day
2.9 mg/m3
0.8333 mg/kg bodyweight/day (DNEL
1 mg/l
1 mg/l
10 mg/l

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PNEC (Sediment)	
PNEC Sediment (fresh water)	NA
PNEC Sediment (Marine water)	NA
PNEC (Oral)	
PNEC Oral (secondary poisoning)	16667 mg/kg food
PNEC (STP)	
PNEC Sewage Treatment Plant	1000 mg/l
	-

Exposure controls

Appropriate engineering controls

Before entering storage tanks and commencing any operation in a confined area, carry out an adequate clean-up, and check the atmosphere for oxygen content, flammability, and the presence of sulphur compounds.

See also Section 16, "Other information"

PPE (for industrial and professional use) Face shield. Gloves. Protective clothing. Safety glasses. Safety shoes or boots. Dust/aerosol mask.













Hand Protection

When there is a risk of contact with the skin, use hydrocarbon-resistant, felt-lined gloves. Materials that are presumably adequate: nitrile (NBR) or PVC with a protection index > 5 (permeation time > 240 mins). Use gloves respecting all the conditions and within the limits set by the manufacturer. Replace gloves immediately in case of cuts, holes or other signs of damages or degradation. If necessary, refer to the EN 374 standard.

Eye Protection

When there is a risk of contact with the eyes, use safety goggles or other means of protection (face shield). If necessary, refer to national standards or to the EN 166 standard.

Skin and body protection

on Long-sleeved overalls. If necessary, refer to the EN 340 and related standards, for definition of characteristics and perfomance according to the risk rating of the area. Antistatic non-skid safety shoes or boots, chemical resistant, if necessary heat resistant and insulated.

Respiratory Protection

Independently from other possible actions (technical modifications, operating procedures, and other means to limit the exposure of workers), personal protection equipment can be used according to necessity. Open or well ventilated spaces: in presence of oil mists and if the product is handled without adequate containment means: use full or half-face masks with filter for mists/aerosols. In case there is a significant presence of vapours (e.g. through handling at high temperature), use full or half-face masks with filter for hydrocarbon vapours. (EN 136/140/145). Closed or confined areas (e.g. tank interiors): the use of protection measures for airways (masks or self-contained breathing apparatus), must be assessed according to the specific activity, as well as level and duration of predicted exposure. (EN 136/140/145).

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Thermal hazard protection If contact with hot product is possible or anticipated, gloves should be

heat-resistant and thermally insulated.

Environmental exposure controls Do not discharge the product into the environment. Prevent discharge

> of undissolved substance to or recover from onsite wastewater. Storage areas/installations should be designed with adequate bunds so as to prevent ground and water pollution in case of leaks or spills. Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed

No special requirements necessary, if handled at room temperature. Consumer exposure controls

Monitoring Methods Monitoring procedures should be chosen according to the indications set by

national authorities or labour contracts., Refer to relevant legislation and in any

case to the good practice of industrial hygiene.

Additional information Note: The Derived No Effect Level (DNEL) is an estimated safe level of

> exposure that is derived from toxicity data in accord with specific guidance within the European REACH regulation. The DNEL may differ from an Occupational Exposure Limit (OEL) for the same chemical. OELs may be

recommended by an individual company, a governmental regulatory body or an

expert organization, such as the Scientific Committee for Occupational Exposure Limits (SCOEL) or the American Conference of Governmental Industrial Hygienists (ACGIH). OELs are considered to be safe exposure levels for a typical worker in an occupational setting for an 8-hour work shift,

40 hour work week, as a time weighted average (TWA) or a 15 minute shortterm

exposure limit (STEL). While also considered to be protective of health,

OELs are derived by a process different from that of REACH.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Attention: The data below are typical values and do not constitute a specification

Color Brown to Yellow

Physical State Liauid

Petroleum Odor Odor **Odor Threshold** No data available рΗ Not applicable **Vapor Pressure** \leq 0.1 hPa (20 deg C) No data available Vapor Density (Air=1) **Initial Boiling Point** No data available

Solubility Soluble in hydrocarbons, insoluble in water

Freezing Point Not applicable **Melting Point** No data available

 $0.85 \text{ TO } 0.88 \text{ kg/L } @ 15^{\circ}\text{C } (59^{\circ}\text{F}) \text{ (Typical)}$ Density 3.8 TO 26.1 $mm^2/s @$ 100°c Viscosity

Coefficient of Thermal expansion/0F No data available **Evaporation Rate** No data available No data available **Decomposition Temperature Octanol/Water Partition Coefficient** No data available **VOC Content**

0% (EU, CH)

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FLAMMABLE PROPERTIES

Flammability (Solid, gas)

Not applicable

Soldification temperature, deg C

-18 Pour Point

FlashPoint, (Cleaveland Open Cup) 205 °C (Minimum)
Autoignition More than 300 deg C

Flammability (Explosive) Limits (& by volume in air)

Lower LEL \geq 45 g/m3 **Upper** No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity May react with strong acids or strong oxidizing agents, such as

chlorates, nitrates, peroxides, etc. resulting in fire/explosive mass

Chemical Stability This material is considered stable under normal ambient and anticipated

and handling conditions of temperature and pressure

Incompatibility with Other Materials: Strong oxidants

Hazardous decomposition Products: None known (none expected)

Possibility of Hazardous reactions None (in normal conditions of storage and handling). Contact

with strong oxidizers (peroxides, chromates, etc.) may cause a fire hazard. A mixture with nitrates or other strong oxidisers (eg chlorates, perchlorates, liquid oxygen) may create an explosive mass. Sensitivity

to heat, friction or shock cannot be assessed in advance.

Conditions to avoid Keep away from strong oxidizers. Keep away from open flames, hot surfaces

and sources of ignition. Avoid the build-up of electrostatic charge.

Hazardous decomposition products In exceptional cases (i.e prolonged storage in tanks contaminated

with water, and presence of anaerobic sulfate-reducing microbial colonies), the product may undergo a degradation and generate small amounts of sulfur

SECTION 101 - TOXICOLOGIAL INFORMATION (mixture)

Acute toxicity Not classified (Based on available data, the classification criteria are not met)

(according to composition)

Serious eye damage/irritation The eye irritation hazard is based on evaluation of data for product

components

Skin Corrosion/Irritation The skin corrosion/irritation hazard is based on evaluation of data for

for product components

Skin Sensitization The skin sensitization hazard is based on evaluation of data for

for product components

LD50 Oral rat ≤2000 mg/kg of body weight (calcualted data). This is based

on the real characteristics of the components and their combination,

taking into account the information provided by the suppliers

LD50 Dermal rabbit ≤2000 mg/kg of body weight (calcualted data). This is based

on the real characteristics of the components and their combination,

taking into account the information provided by the suppliers

LC50 inhalation rat (mg/l) ≤5 mg/l/4h (calcualted data). This evaluation is based

on the real characteristics of the components and their combination,

taking into account the information provided by the suppliers

ATE Oral 2000,000 mg/kg bodyweight
ATE Dermal 2000,000 mg/kg bodyweight

ATE Vapours 5,000 mg/l/4h
ATE (dust, mist) 5,000 mg/l/4h

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SECTION 11 - TOXICOLOGIAL INFORMATION (Contd from previous page)

Acute dermal toxicityThe acute dermal toxicity hazard is based on evaluation of data

for product components(≥2000 mg/kg of BW). Not classified pH: Not applicable This product contains one or more components (Calcium sulphonate, Calcium sulphonate) classified

as sensitizers.

Amounts contained in the product: 0,1÷ 0,99 % m/m max (each)

Acute Oral Toxicity The acute Oral toxicity hazard is based on evaluation of data

for product components(≥2000 mg/kg of BW). Not classified

pH: Not applicable

Acute Inhalation Toxicity The acute inhalation toxicity hazard is based on evaluation of data

for product components(≥5mg/l/4h)). Not classified

Acute Toxicity Estimate Not determined(≥2000000 mg/kg of BW)

Germ Cell Mutagenicity The hazard evalution is based on data for components or a similar

material. In any case, ≤0.1wt% of any EU notified mutagenic

Carcinogenicity The hazard evalution is based on data for components or a similar

material. DMSO is less than 3 wt%. Not classified

None of the components of this product are listed as carcinogen

by NTP, IARC, OSHA, EU or others.

Reproductive Toxicity The hazard evalution is based on data for components or a similar

material. Not classified This product contains a substance (Dodecylphenol, branched) classified as Toxic for Reproduction

according to the criteria of EU

Specific Target Oxygen The hazard evalution is based on data for components or a similar

Toxicity - Single Exposure material. According to composition

Specific Target OxygenThe hazard evalution is based on data for components or a similar **Toxicity - Repeated Exposure**material. Not classified. The product contains dodecylphenol.

material. Not classified. The product contains dodecylphenol. Rats given high, repeated daily doses of dodecylphenol by oral intubation, experienced various effects on a number of organs, including adrenal, thyroid, liver, ovary, testes, bone marrow, and blood cell formation. The relevance of these effects to humans is

uncertain.

Aspiration Hazard Not classified. Not classified (Based on available data, the

classification criteria are not met)

Viscosity, kinematic: 3.8 TO 26.1mm2/s (100 °C) (ASTM D 445)

Potential Adverse human health effects and symptoms Contact with eyes may cause temporary

reddening and irritation. Prolonged and repeated skin contact may

cause reddening, irritation and dermatitis.

Other information None ADDITIONAL TOXICOLOGY INFORMATION

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continued exposure. Brief or intermittent skin contact with used motor oil is not expeced to have serious effects in humans if the oil is thoroughly removed by washing with soap and water

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY/Ecolory-General This product has not been tested. The statement has been derived

from the properties of individual components

According to the components, and by comparison with other products

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of the same type and composition, it is expected that this product has a toxicity for aquatic organisms > 100 mg/l, and must not be regarded as dangerous to the environment. An uncontrolled release to the environment may nevertheless produce a contamination of different environmental compartments (soil, underground, surface water bodies, aquifers). Handle according to general working hygiene practices to avoid pollution and release into the environment.

Ecology - Air This product has a low vapour pressure. A significant exposure

may happen only if the product is used at high temperature,

or in case of sprays and mists

Ecology - Water This product is not soluble in water. It floats on water and forms a

film on the surface. The damage to aquatic organisms is of

mechanical kind (immobilization and entrapment)

Mobility in Soil No data available

PERSISTENCE ANDThis material is not expected to be readily biodegradable. The product

has not been tested. The statement has been derived from the properties of the individual components. In exceptional cases, (i.e.

prolonged storage in tanks contaminated with water, and presence of anaerobic sufate-reducing microbial colonies), the product may

undergo a degradation and generate small amounts of sulfur

compounds, including H2S. See separate section 16

DATA OF MIXUTURE

DEGRADABILITY

DATA OF WIINGTORE	
LC 50 Fish 1	≥100 mg/l (calculated from data provided by suppliers)
EC 50 Daphnia 1	≥100 mg/l (calculated from data provided by suppliers)
ErC50 (algae)	≥100 mg/l (calculated from data provided by suppliers)

POTENTIAL TO

BIO ACCUMULATE

Bio Concentration Factor No data available
Octanol/Water Partition Effect No data available

Environment None as per EC 435/2010

This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII

The components in this formulation do not meet the criteria for classification as PBT or vPvB. The product criteria (point 1.1) should be considered prudentially as "Persistent" in the environment, according to the REACH Annex XIII

SECTION 13 - DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose off in a manner consistent with applicable regulations. Contact your local environmental or health authorities for approved disposal or recycling methods.EWC is 13.02.05

Do not dispose of the product, either new or used, by discharging into sewers, tunnels, lakes or water courses. Deliver to a qualified official collector.

Do not apply industrial sludge to natural soils. Sludge should be incinerated, contained or reclaimed. Dispose of in a safe manner in accordance with local/national regulations.

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European Waste Catalogue code(s) (Decision 2001/118/CE): 13 02 05* (mineral based non-chlorinated engine, gear and lubricating oils). This EWC code is only a general indication, and takes into account the original composition of the product and its intended use. The user has the responsibility of choosing the right EWC code, considering the actual use of the product, alterations and contaminations. **Empty containers** may contain combustible product residues. Do not cut, weld, drill, burn or incinerate

empty containers or drums, unless they have been cleaned, and declared safe.

Ecology - Waste materials - The product as it is does not contain halogenated substances.

SECTION 14 - TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements

UN Number Not dangerous goods in sense of transport regulations

UN Proper shipping name Not applicable Packing Group (UN) Not applicable

DOT SHIPPING DESCRIPTIONNOT REGULATED AS HAZARDOUS MATERIAL UNDER 49 CFR **IMO/IMDG Shipping Description**NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

UNDER THE IMDG CODE

ICAO/IATA Shipping Description NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT

UNDER ICAO

Overland transport

Transport regulations (ADR) No subject Transport Regulations (RID) Not applicable

Classification code -- Limited Quantities (ADR) --

Transport by Sea

Transport regulations (IMDG) Not subject

Transport regulations (ADNR) Not subject Limited Quantitees (IMDG) Not applicable

Port Regulation Law Not applicable EmS-No. (1) -- MFAG-No --

Air transport

Transport regulations (IATA)Not subjectInstruction 'cargo' (ICAO)Not applicableInstruction 'passenger' (ICAO)Not applicableInstruction 'passenger' - Limited Quantites (ICAO)Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 NOT APPLICABLE

and the IBC Code:

SECTION 15 - REGULATORY INFORMATION (Mixture)

EPCRA 311/312 CATEGORIES Not Applicable

REGULATORY LISTS SEARCHED

 01-1 = IARC Group 1
 05 = MA RTK

 01-2A = IARC Group 2A
 06 = NJ RTK

 01-2B = IARC Group 2B
 07 = PA RTK

 02 - NTP Carcinogen
 08-1 = TSCA 5e

 03 - EPCRA 313
 08-2 = tsca 12(B)

04 = CA Proposition 65

No REACH Annex XVII restrictions

No ingredients are included in the REACH Candidate list (> 0,1 % m/m)

The following components of this material are found on the regulatory lists indicated.

Distillates, hydrotreated heavy paraffinic 05,06,07

Ethoxylated nonylphenol (REACH) EC polymer CAS 9016459

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Relevant EU Legislation

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18/12/06 concerning the Registration, Evalulation, Auhtorization and Restriction of Chemicals (REACH) Regulation (EC) No. 1272/2008 of European parliament and of the councfil of 16/12/08 on classification, labelling and packaging of substances and mixtures, amending and repealing directive 67/548/EC and 1999/45/EC and amending regulation (EC) no. 1907/2006

Directives 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CEE, 97/42/CE, 98/24/CE, 99/38,CE, 99/92/CE, 2001/45/CE, 2003/10/CE, 2003/18/CE (health and safety on the workplace) Directive 98/24/EC Protection of health and safety or workers from risk related to chemical agents at work

Directive 92/85/CE - measures to encourage improvements in the safety and health at work of pregnant workers and workers

who have recently given birth or are breastfeeding.

Directives 96/82/CE and 2003/105/CE - control of major accident hazards involving dangerous substances

Directive 2004/42/CE limitation of emissions of VOC

Labelling according to directives of 67/548/EEC amd 1999/45/EC

13 02 05 **VOC Content** 0% (EU, CH)

Chemical safety assessment F-RG36:WGK*D)-1:WGK (VwVwS);LGK(D)-12;Vbf class D-NA;

Regional regulations National adoption of EU Directives concerning health

and safety on the workplace. National laws on classification and labeling of dangerous substances/preparations (Adoption of Directive 67/548/CE and subsequent Adaptations to Technical Progress - ATP, and Directive 1999/45/CE). National adoption of EU Directives concerning control of major-accident hazards involving dangerous substances (96/82/CE - 2003/105/CE).

Relevant national laws on prevention of water pollution. Relevant national laws on protection of the health of pregnant workers (National adoption of Dir. 92/85/EEC). National adoption of Directives 75/439/CEE - 87/101/CEE concerning disposal of used oils.

For the following substances of this mixuture a chemical safety assessment has been carried out Mineral base oil, severely refined

Phosphorodithioic acid, mixed O,O-bis(1,3 dmethylbutyl and iso-Pr) esters, zinc salts

Phenolm dodecyl, branched, sulfurized

Benzenesulfonic acid, mono C16-24 alkyl derivatives, calcium salts

CHEMICAL INVENTORIES

EURAL Code

All components comply with the following chemical inventory requirements:

AIIC (Australia), DSL (Canada), ENCS (Japan), KECI (Korea), NZIoC(New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (United States)

One or more components is listed on ELINCS (European Union). All other components are listed or exempted from listing on EINECS

NEW JERSEY RTK CLASSIFICATION

Under the New Jersey Right-to-Know Act L 1983 Chapter 315 N.J.S.A 34:5A-1 et.seq., the product is to be identified as follows: PETROLEUM OIL (Motor Oil)

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SECTION 16 - OTHER INFORMATION

NFPA RATINGSHEALTH0FLAMMABILITY1REACTIVITY0HMIS RatingsHEALTH0FLAMMABILITY1REACTIVITY0

(0-Least, 1-Slight, 2 -Moderate, 3 -High, 4- Extreme, PPE - Personal Protection Equipment Index recommendation; * Chronic Effect Indicator. These values are obtained using the guidelines or published evaluations preparted by the National Fire Protection Association (NFPA- USA) or the National Paint and Coating Association (for HMIS Ratings)

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT

TLV - Treshold Limit Value	TWA - Time weighted average		
STEL - Short term exposure limit	PEL - Permission expsoure limit		
GHS - Globally Harmonized System	CAS - Chemical abstract service number		
ACGIH -Americal conference on governmental	IMO/IMDG - International Maritime Dangerous		
industrial Hygenine	Goods Code		
API - American Petroleum Institute	SDS - Safety Data Sheet		
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)		
DOT - Department of Transport	NTP - National Toxicology Program (USA)		
	OSHA - Occupational Safety and Health		
IARC - International agency for research on cancer	Administration		
NCEL - New chemical exposure limit	EPA - Environmental Protection Agency		
SCBA - Self contained breathing apparatus	NA - Not applicable		
ND Not available	CSR - Chemical Safety Report		
DNEL - Derived No effect Level	DMEL - Derived Minimum Effect Level		
EC - 50 - Effective Concentration , 50%	EL50 - Effective Loading, 50%		
IC 50 - Inhibition concentration, 50%	LC 50 - Lethal concentration, 50%		
LD 50 -Lethal dose, 50%	LL50 - Lethal loading, 50%		
LOAEL - Low observed adverse effects level	NOEL - No observed effects level		
NOAEL No observed adverse effects level	OECD Organization for economic co-op and devmt		
PNEC Predicted no effect concentration	PBT - Predicted, bioaccumulative, toxic		
STOT - Single Target Organ Toxicity	STOT - RE (above) with repeated exposure		
STOT - SE (Above) with single exposure	vPvB - Very persistent, very bioaccumulative		
UVCB - susbtance of unkonw or variable composition, complex reaction products of bio materials			
WAF - Water accommodated fraction			

Full text of R-, H- and EUH-phrases

Acute Tox 4 (Oral)	Acute Toxicity (oral), category 4
Aquatic acute 1	Hazardous to the aquatic environment - acute Hazard, category 1
Aquatic chronic 1	Hazardous to the aquatic environment - CHronic Hazard, category 1
Aquatic chronic 2	Hazardous to the aquatic environment - CHronic Hazard, category 2
Aquatic chronic 3	Hazardous to the aquatic environment - CHronic Hazard, category 3
Aquatic chronic 4	Hazardous to the aquatic environment - CHronic Hazard, category 4
Eye Dam 1	Serious eye damage/eye irritation, category 1
Eye Irrt. 2	Serious eye damage/eye irritation, category 2
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit.2	Skincorrosion/irritation, category 2
Skin Sens. 1B	Sensitisation - Skin, category 1B
H 302	Harmful if swallowed
H 315	Causes Skin Irritation
H 317	May cause an allergic skin reaction
H 318	Causes serious eye damage
H 319	Causes serious eye irritation

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H 361f	Supsected of damaging fertility
H 400	Very toxic to acquatic life
H 410	Very toxic to acquatic life with long lasting effects
H 411	Toxic to acqualic life with long lasting effects
Full text of R-, H- and	EUH-phrases (continued)
H 412	Harmful to aquatic life with long lasting effects
H 413	May cause long lasting effects to aquatic life
R 22	Harmful if swallowed
R 36/38	Irritating to eyes/skin
R 38	Irritating to skin
R 41	Risk of serious damage to eyes
R 43	May cause sensitization by skin contact
R 50/53	Very toxic to aquatic organisms, may cause long term adverse effects to them
R 51/53	Toxic to aquatic organisms, ,may cause long term adverse effects
R 53	May cause long term adverse effects in the aquatic environment
R 62	Possible risk of impaired fertility
N	Dangerous for the environment
Xi	Irritant

Χn

Prepared as per to the 29 CFR 1910.1200 (2012) and EU by United Grease and Lubricants Co LLC, PO Box 2685, Ajman, United Arab Emirates. Meets EU No. 2015/830 regulations also

Harmful

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made avaialble subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose

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