

SAFETY DATA SHEET

JLM Hydraulic Valve Lifter Treatment 250ml

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier	
Trade name	
-	ifter Treatment 250ml
Product no. J06070	
Unique formula identifie 54TH-U03T-700Y-WXI	er (UFI) N7
1.2. Relevant identified use	s of the substance or mixture and uses advised against
Relevant identified uses Additive	of the substance or mixture
Use descriptors (REACH)	
Product category	Description
PC24	Lubricants, Greases and Release Products
Uses advised against None known.	
1.3. Details of the supplier	of the safety data sheet
Company and address JLM Lubricants BV Schiphol Boulevard 1 1118 BG Schiphol Netherlands +31 (0)20 2014995 www.jlmlubricants.cc Contact person Product Safety Depar E-mail info@jlmlubricants.cc Revision 24/01/2023 SDS Version 3.0 Date of previous version 17/10/2022 (2.0)	27 om tment om
1.4. Emergency telephone i Contact The National Po See section 4 "First aid m	isons Information Service (dial 111, 24 h service).
SECTION 2: Hazards identi	fication
2.1. Classification of the sul Eye Dam. 1; H318, Cause	

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)





Signal word	
Danger	
Hazard statement	ε(S)
Causes serious	s eye damage. (H318)
Harmful to aq	uatic life with long lasting effects. (H412)
Safety statement(s)
General	
-	
Prevention	
Avoid releas	e to the environment. (P273)
Wear eye pr	otection/protective gloves/protective clothing. (P280)
Response	
	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
	nsing. (P305+P351+P338)
Immediately	/ call a POISON CENTER/doctor. (P310)
Storage	
-	
▼ Disposal	
	ontents/container in accordance with local regulation. (P501)
Hazardous substa	
	nioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
	nioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts
Additional label	
UFI: U8AJ-74A7	/-YUUE-35DW
2.3. Other hazards	
Additional warnin	
	roduct does not contain any substances considered to meet the criteria classifying them as PBT
and/or vPvB.	
This product d	oes not contain any substances considered to be endocrine disruptors in accordance with the

This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/information on ingredients

3.1. ▼ Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]	CAS No.: 64742-54-7 EC No.: 265-157-1 UK-REACH: Index No.: 649-467-00-8	50-75%	Asp. Tox. 1, H304	[12]
Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex	CAS No.: 64742-65-0 EC No.: 265-169-7 UK-REACH: Index No.: 649-474-00-6	2,5-5%	Asp. Tox. 1, H304	[12]



Combination of hydrocarbons obtained by encoded tertoloum faction by solver erystalization. It consists reprodominantly of hydrocarbons having carbon numbers predominantly of hydrocarbons having carbon encoded by repredominantly of hydrocarbons having carbon solver having carbon encoded by repredominantly of hydrocarbons having carbon carbonatic calcium salts, effect having carbon encoded by repredominantly of hydrocarbons having carbon encoded by repredominantly of hydrocarbons having carbon encoded by repredominantly of hydrocarbons by the repredominantly of hydrocarbons <br< th=""><th></th><th></th><th></th><th></th><th></th></br<>					
carbonates, calcium salts, overbasedCC No: 272-234-3 UK-REACH: Index No:Final SolutionDistillates (petroleum), sobuent-refined heavy paraffinic/Baseoli - UK-REACH: Index No: 649-454-00-7 combination of hydrocarbons a solvent extrinate from a solvent extrinate from braing carbon numbers predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through tests 100 SUS aCAS No.: 84605-29-8 UK-REACH: Index No.:0,5-2,5%Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Index No.:Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso- P exters, zinc salts Bu and iso-P) exters, zinc salts EC No.: 285-917-4 UK-REACH: Index No.:0,5-2,5%Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Index No.:Distillates (petroleum), hydrorated light paraffinicBasceli unspecified(X complex UK-REACH: Index No: 649-468-00-3Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411 Index No:Distillates (petroleum), hydrorated light paraffinicBasceli unspecified(X complex Index No: 649-468-00-3Skin Irrit. 2, H315 Eye	obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at				
solvent-refined heavy paraffinic;Baseoil- unspecified;IA complex combination of hydrocarbons oblained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces af nished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). Phosphorodithioic acid, mixed Solvent extraction protess. It consists predominantly in the range of C20 through C50 and produces af nished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C). Phosphorodithioic acid, mixed Solvent extraction produces af nished oil with site of the range of C20 through C50 and produces af nished oil with hydrogen in the presence of atalyst. It complex performs fraction with hydrogen in the presence of atalyst. It complex solvent herange of C15 through C30 and produces a finished oil with a viscosity of less thad Nydrogen in the presence of atalyst. It complexs hydrogen in the presence of atalyst. It consists of hydrogen in the presence of hydrogen in the presence of hydrogen in the prese	carbonates, calcium salts,	EC No.: 272-234-3 UK-REACH:	1-5%	Aquatic Chronic 4, H413	[19]
O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts EC No.: 283-392-8 UK-REACH: Index No.: Eye Dam. 1, H318 Aquatic Chronic 2, H411 Phosphorodithioic acid, mixed CAS No.: 85940-28-9 CAS No.: 85940-28-9 UK-REACH: Index No.: 0,5-2,5% Skin Irrit. 2, H315 Eye Dam. 1, H318 UK-REACH: Aquatic Chronic 2, H411 Bu and iso-Pr) esters, zinc salts UK-REACH: Index No.: Aquatic Chronic 2, H411 Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100° F(19CSt at 40°C). It contains a relatively large proportion of saturated Kent Hatta H	solvent-refined heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at	EC No.: 265-090-8 UK-REACH: Index No.: 649-454-00-7	1-5%	Asp. Tox. 1, H304	
O,O-bis(2-ethylhexyl and iso- Bu and iso-Pr) esters, zinc saltsEC No.: 288-917-4Eye Dam. 1, H318 Aquatic Chronic 2, H411Distillates (petroleum), hydrotreated lightCAS No.: 64742-55-8 EC No.: 265-158-7<1%	O,O-bis(1,3-dimethylbutyl and	EC No.: 283-392-8 UK-REACH:	0,5-2,5%	Eye Dam. 1, H318	
hydrotreated lightEC No.: 265-158-7paraffinic;Baseoil -UK-REACH:unspecified;[A complexIndex No.: 649-468-00-3combination of hydrocarbonsobtained by treating apetroleum fraction with	O,O-bis(2-ethylhexyl and iso- Bu and iso-Pr) esters, zinc	EC No.: 288-917-4 UK-REACH:	0,5-2,5%	Eye Dam. 1, H318	
	hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated	EC No.: 265-158-7 UK-REACH:	<1%		[12]



See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

▼ Other information

[12] The classification as a carcinogen will not be taken into account as the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions - Dimethyl sulphoxide extraction refractive index method' (CLP, Annex VI, note L). [19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

Upon irritation: rinse with water. In the event of continued irritation, seek medical assistance.

Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

▼ Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.

Burns

Not applicable.

4.2. ▼ Most important symptoms and effects, both acute and delayed

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist. Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO2)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures



Avoid direct contact with spilled substances.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage material

Keep only in original packaging.

Storage temperature

Dry, cool and well ventilated

Store out of direct sunlight.

Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. ▼ Specific end use(s)

This product should only be used for applications quoted in section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. ▼ Control parameters

Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

No data available.

PNEC

No data available.

8.2. ▼ Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios

There are no exposure scenarios implemented for this product.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures



In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible, collect spillage during work.

8.3. Individual protection measures, such as personal protective equipment

Generally

Use only UKCA marked protective equipment.

Respiratory Equipment

No specific requirements

Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn.	-	-	R

Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Nitrile	0,38	> 240	EN374-2, EN374-3, EN388	

Eye protection

TypeStandardsSafety glasses with sideEN166shields.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Colour Brown Odour / Odour threshold Characteristic рΗ No data available Density (g/cm³) 897.7 (15 °C) Kinematic viscosity 82.68 mm²/s (40 °C) Particle characteristics Not applicable - product is a liquid Phase changes Melting point/Freezing point (°C) No data available Softening point/range (waxes and pastes) (°C) Does not apply to liquids. Boiling point (°C) No data available Vapour pressure No data available Relative vapour density No data available



Decomposition temperature (°C) No data available Data on fire and explosion hazards Flash point (°C) >201 Auto-Ignition (°C) Not applicable - flash point > 200°C Flammability (°C) No data available Lower and upper explosion limit (% v/v) No data available Solubility Solubility in water Insoluble n-octanol/water coefficient No data available Solubility in fat (g/L) No data available 9.2. Other information Evaporation rate (n-butylacetate = 100) No data available Other physical and chemical parameters No data available. SECTION 10: Stability and reactivity 10.1. Reactivity No data available. 10.2. Chemical stability The product is stable under the conditions, noted in section 7 "Handling and storage". 10.3. Possibility of hazardous reactions None known. 10.4. Conditions to avoid None known. 10.5. Incompatible materials Strong acids, strong bases, strong oxidizing agents, and strong reducing agents. 10.6. Hazardous decomposition products The product is not degraded when used as specified in section 1. SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
Rat
Oral
LD50
>5000 mg/kgbw
Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]



Test method Species Route of exposure Test Result Other information	Rabbit Dermal LD50 >5000 mg/kg
Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
Test method Species Route of exposure Test Result Other information	Rat Inhalation LC50 5,53 mg/L
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	
Species Route of exposure	Rat Oral
Test Result	LD50
Other information	>5000 mg/kgbw
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	
Species Route of exposure	Rabbit Dermal
Test Result	LD50 >5000 mg/kg
Other information	
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	
Species Route of exposure	Rat Inhalation
Test Result	LC50
Result Other information	>5,53 mg/l/4h
Product/substance	Distillates (petroleum), solvent-refined heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	produces a minimed on with a viscosity of at least 100 505 at 100 Γ (1905) at 40 C).
Species Route of exposure	Rat Oral
Test	LD50
Result Other information	>5000 mg/kgbw
Other information	



Product/substance Test method Species Route of exposure Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts OECD 401 Rat Oral LD50 3150 mg/L
Product/substance Test method Species Route of exposure Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts OECD 402 Rat Dermal LD50 >2002 mg/kgbw
Product/substance Test method Species Route of exposure Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts OECD 402 Rabbit Dermal LD50 >2000 mg/kg
Product/substance Test method Species Route of exposure Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Rat Inhalation LC50 >5 mg/l/4h
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
Test method	
Species	Rat
Route of exposure Test	Oral LD50
Result	>5000 mg/kg
Other information	
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
Test method	
Species	Rabbit
Route of exposure Test	Dermal LD50
Result	>5000 mg/kg
Other information	
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]
Test method Species	Rat
Route of exposure	Rat Inhalation
Test	LC50 (dust)



Result Other information >5,53 mg/l/4h

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Based on available data, the classification criteria are not met.

Skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Product/substance

Test method

Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.]

Test method Species Route of exposure Target organ Duration Test Result Conclusion Other information	Rat Oral 90 days LOAEL 125 mg/kgbw
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	Rat
Species Route of exposure Target organ	Oral
Duration Test	90 days LOAEL
Result	125 mg/kgbw
Conclusion Other information	No adverse effect observed
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	
Species Route of exposure Target organ	Rat Dermal
Duration	90 days
Test Result	NOAEL 1000 mg/kgbw
Conclusion Other information	No adverse effect observed



Product/substance Test method Species Route of exposure Target organ Duration Test Result Conclusion Other information	Distillates (petroleum), solvent-refined heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).] Rat Oral 90 days LOAEL 125 mg/kgbw
Product/substance Test method Species Route of exposure Target organ Duration Test Result Conclusion Other information	Distillates (petroleum), solvent-refined heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained as the raffinate from a solvent extraction process. It consists predominantly of saturated hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity of at least 100 SUS at 100 °F (19cSt at 40 °C).] Rat Dermal 90 days NOAEL 1000 mg/kgbw
Product/substance Test method Species Route of exposure Target organ Duration Test Result Conclusion Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Rat Oral 90 days NOAEL 16 mg/kgbw
Product/substance Test method Species Route of exposure Target organ Duration Test Result Conclusion Other information	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] OECD 408 Rat, male Oral 90 days LOAEL 125 mg/kg bw/day
Aspiration hazard Product/substance Kin. viscocity (mm²/s) Test Conclusion Other information	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).] 32,2 Aspiration hazard not applicable

11.2. Information on other hazards



▼Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

Endocrine disrupting properties

None known.

Other information

None known.

SECTION 12: Ecological information

Section 12. Leological in	
12.1. Toxicity Product/substance Test method Species Compartment Duration Test Result Other information	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large proportion of saturated hydrocarbons.] Fish, Pimephales promelas LC50 >100 mg/L
Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of
Test method	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
Species	consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and
Compartment	produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large
Duration	proportion of saturated hydrocarbons.]
Test	Crustacean, Daphnia magna
Result	EC50
Other information	>10000 mg/L
Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of
Test method	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
Species	consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and
Compartment	produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large
Duration	proportion of saturated hydrocarbons.]
Test	Fish, Oncorhynchus mykiss
Result	NOEC
Other information	1000 mg/L
Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of
Test method	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
Species	consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and
Compartment	produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large
Duration	proportion of saturated hydrocarbons.]
Test	Crustacean, Daphnia magna
Result	NOEC
Other information	10 mg/L



Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of
Test method	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
Species	consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and
Compartment	produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large
Duration	proportion of saturated hydrocarbons.]
Test	Algae, Pseudokirchneriella subcapitata
Result	NOEC
Other information	>100 mg/L
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination
Test method	of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent
Species	crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the
Compartment	range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F
Duration	(19cSt at 40 °C).]
Test	Fish, Pimephales promelas
Result	LC50
Other information	>100 mg/L
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination
Test method	of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent
Species	crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the
Compartment	range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F
Duration	(19cSt at 40 °C).]
Test	Crustacean, Daphnia magna
Result	EC50
Other information	>10000 mg/L
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination
Test method	of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent
Species	crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the
Compartment	range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F
Duration	(19cSt at 40 °C).]
Test	Fish, Oncorhynchus mykiss
Result	NOEC
Other information	1000 mg/L
Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination
Test method	of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent
Species	crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the
Compartment	range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F
Duration	(19cSt at 40 °C).]
Test	Crustacean, Daphnia magna
Result	NOEC
Other information	10 mg/L



Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A complex combination of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction by solvent crystallization. It consists predominantly of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil with a viscosity not less than 100 SUS at 100 °F (19cSt at 40 °C).]
Test method	
Species	Algae, Pseudokirchneriella subcapitata
Compartment	
Duration	
Test	NOEC
Result	>100 mg/L
Other information	-
Product/substance	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Test method	OECD 203
Species	Fish, Oncorhynchus mykiss
Compartment	
Duration	
Test	LC50
Result	4,5 mg/L
Other information	
Product/substance	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Test method	
Species	Fish, Cyprinodon variegatus
Compartment	
Duration	
	LC50
Test	
Result	46 mg/L
Other information	
Product/substance	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Test method	
Species	Bacteria
Compartment	
Duration	3 hours
Test	LC50
Result	>10000
Other information	- 10000
Product/substance	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Test method	OECD 202
Species	Daphnia, Daphnia magna
	Saprina, Saprina Inagra
Compartment	
Duration	
Test	EC50
Result	23 mg/L
Other information	
Product/substance	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Test method	
Species	Daphnia, Daphnia magna
Compartment	
Duration	21 days
Test	EC50
Result	0,8 mg/L
Other information	
Des des st. d. d. d.	
Product/substance Test method	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts
Species	Algae, Chlorophyta
Compartment	
Duration	3 hours
Test	EC50
Result	10000 mg/L



Other information		
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Algae, Chlorophyta 72 hours EC50 21 mg/L	5
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts OECD 201 Algae, Desmodesmus subspicatus 72 hours ErC50 21 mg/L	5
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Fish, Oncorhynchus mykiss 96 hours NOEC 1,8 mg/L	5
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Daphnia, Daphnia magna 48 hours NOEC 10 mg/L	5
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Fish, Daphnia magna 21 days NOEC 0,4 mg/L	5
Product/substance Test method Species Compartment Duration Test Result Other information	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts Algae, Chlorophyta 72 hours NOEC 10 mg/L	5
Product/substance Test method Species Compartment Duration	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex hydrocarbons obtained by treating a petroleum fraction with hydrogen in the preser consists of hydrocarbons having carbon numbers predominantly in the range of C15 produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). relatively large proportion of saturated hydrocarbons.] Fish, Pimephales promelas	nce of a catalyst. It 5 through C30 and



	processing of the second s
Test	IC50
Result	>100 mg/L
Other information	
Product/substance	Distillator (patroloum) hydrotroatod light paraffinic:Pacopil upspecified:[A complex combination of
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of
	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
	consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and
	produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a
	relatively large proportion of saturated hydrocarbons.]
Test method	
Species	Crustacean, Daphnia magna
Compartment	
Duration	
Test	EC50
Result	>10000 mg/L
Other information	10000 mg/ 2
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of
	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
	consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and
	produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a
	relatively large proportion of saturated hydrocarbons.]
Test method	
Species	Fish, Oncorhynchus mykiss
•	
Compartment	
Duration	
Test	NOEC
Result	>1000 mg/L
Other information	
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of
	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
	consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and
	consists of flyar deal boths having carbon furnisers predominantly in the range of CTS through CSS and
	produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a
	relatively large proportion of saturated hydrocarbons.]
Test method	
Species	Crustacean, Daphnia magna
Compartment	
Duration	
Test	NOEC
Result	10 mg/L
Other information	To high
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex combination of
	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
	consists of hydrocarbons having carbon numbers predominantly in the range of C15 through C30 and
	produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). It contains a
	relatively large proportion of saturated hydrocarbons.]
Fest method	
Species	Algae, Pseudokirchneriella subcapitata
Compartment	
Duration	
Test	NOEC
Result	>100 mg/L
Other information	
2 Development and de	areadability.
2. Persistence and de	
Product/substance	Distillates (petroleum), hydrotreated heavy paraffinic;Baseoil - unspecified;[A complex combination of
	hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It
	consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and
	produces a finished oil of at least 100 SUS at 100 °F (19cSt at 40 °C). It contains a relatively large
	proportion of saturated hydrocarbons.]
Biodegradable	No
Test method	OECD 301 F
Result	31% 28 days

31% 28 days

Result



		§miubricants.com
Product/substance Biodegradable Test method Result	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A cor of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction crystallization. It consists predominantly of hydrocarbons having carbon numbers pi range of C20 through C50 and produces a finished oil with a viscosity not less than 1 (19cSt at 40 °C).] No OECD 301 F 31% 28d	by solvent redominantly in the
Result	51% 280	
Product/substance Biodegradable Test method Result	Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts No OECD 301 B 1,5% - 28 days	;
Product/substance	Distillates (petroleum), hydrotreated light paraffinic;Baseoil - unspecified;[A complex hydrocarbons obtained by treating a petroleum fraction with hydrogen in the preser consists of hydrocarbons having carbon numbers predominantly in the range of C15 produces a finished oil with a viscosity of less than 100 SUS at 100 °F (19cSt at 40 °C). relatively large proportion of saturated hydrocarbons.]	nce of a catalyst. It 5 through C30 and
Biodegradable Test method	No OECD 301 F	
Result	31%, 28 days	
12.3. Bioaccumulative pote Product/substance	Distillates (petroleum), solvent-dewaxed heavy paraffinic;Baseoil - unspecified;[A cor of hydrocarbons obtained by removal of normal paraffins from a petroleum fraction crystallization. It consists predominantly of hydrocarbons having carbon numbers per range of C20 through C50 and produces a finished oil with a viscosity not less than 1	by solvent redominantly in the
Test method Potential bioaccumulation LogPow BCF Other information	(19cSt at 40 °C).] No data available. 9,2 260	
 12.4. Mobility in soil No data available. 12.5. Results of PBT and vF This mixture/product do vPvB. 	ovB assessment bes not contain any substances considered to meet the criteria classifying the	m as PBT and/or
12.6. Endocrine disrupting None known.	properties	
12.7. Other adverse effects This product contains su organisms.	s ubstances that are toxic to the environment. May result in adverse effects to a	aquatic
	ubstances, which may cause adverse long-term effects to the aquatic environ	ment.
SECTION 13: Disposal con	siderations	
HP 14 – Ecotoxic Dispose of contents/con	ne regulations on hazardous waste. ntainer to an approved waste disposal plant. 7/2014 of 18 December 2014 on waste as retained and amended in UK law.	
13 02 05* Mineral-l Specific labelling Not applicable. Contaminated packing	based non-chlorinated engine, gear and lubricating oils	
Packaging containing re	esidues of the product must be disposed of similarly to the product.	



	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informatior
ADR	-	-	-	-	-	-
MDG	-	-	-	-	-	-
* Env Addi No 14.6. No 14.7.	Special precau ot applicable.	ion Joods according to AD Itions for user sport in bulk accordin		nts	-	-
		atory information				
Re Du SE Ac Sc	estrictions for a Restricted to emands for specific re Vestor - Catego Not applicable ditional inform Not applicable ources The Managen Regulation (Ef Regulation (Ef Regul	professional users. ecific education quirements. ries / dangerous subs e. nation e. U) No 1357/2014 of 18 C) No 1357/2014 of 18 C) No 1272/2008 on cl amended in UK law. C) No 1907/2006 conc tained and amended	tances fety at Work Regula 3 December 2014 or assification, labellir erning the Registra	tions 1999. n waste as retained a ng and packaging of	and amended in UK la substances and mixt	ures (CLP) as
SEC	TION 16: Other	information				
H: H: H4 H4 The f P(Abbr AI AI	304, May be fat 315, Causes ski 318, Causes ser 411, Toxic to ac 413, May cause full text of iden C24 = Lubricant eviations and a DN = European	rious eye damage. quatic life with long last long lasting harmful tified uses as mention cs, Greases and Releas acronyms Provisions concerning ean Agreement conce city Estimate	nters airways. sting effects. effects to aquatic li ned in section 1 se Products g the International	Carriage of Dangero		

CAS = Chemical Abstracts Service

CE = Conformité Européenne

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]



CSA = Chemical Safety Assessment CSR = Chemical Safety Report DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario EUH statement = CLP-specific Hazard statement EWC = European Waste Catalogue GHS = Globally Harmonized System of Classification and Labelling of Chemicals IARC = International Agency for Research on Cancer (IARC) IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number SCL = A specific concentration limit SVHC = Substances of Very High Concern STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure TWA = Time weighted average UN = United Nations UVBC = Unknown or variable composition, complex reaction products or of biological materials VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative Additional information The classification of the substance/mixture in regard of health hazards are in accordance with the calculation

methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law. The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The safety data sheet is validated by Product Safety Department

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en