



## Lucas Oil Synthetic 5W-30 C3 ECO-V Engine Oil

### Lucas Oil Products UK (MT)

Part Number: 47032, 47033, 4703, 447035

Version No: 2.2

Safety Data Sheet (Conforms to Annex II of REACH (1907/2006) - Regulation 2020/878)

Issue Date: 22/07/2024

Print Date: 22/07/2024

S.REACH.MLT.EN

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

### 1.1. Product Identifier

Product name	Lucas Oil Synthetic 5W-30 C3 ECO-V Engine Oil
Chemical Name	Not Applicable
Synonyms	Mixture
Chemical formula	Not Applicable
Other means of identification	Not Available

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Category Consumer	PC24   Lubricants, greases, release products
Relevant identified uses	Use according to manufacturer's directions.
Uses advised against	No specific uses advised against are identified.

### 1.3. Details of the manufacturer or supplier of the safety data sheet

Registered company name	Lucas Oil Products UK (MT)	Lucas Oil Products Europe Ltd
Address	Unit 4 Cunliffe Drive Llangefni Industrial Estate LL77 7JA Llangefni Great Britain	Block 3 Harcourt Centre Dublin 2 Ireland
Telephone	+44 (0) 1248 723 666	+44 344 225 5400
Fax	Not Available	Not Available
Website	<a href="http://www.lucasoil.co.uk">www.lucasoil.co.uk</a>	<a href="http://www.lucasoil.eu.com">www.lucasoil.eu.com</a>
Email	Info@LucasOil.co.uk	info@lucasoil.eu.com

### 1.4. Emergency telephone number

Association / Organisation	Medicines & Poisons Info Office	ChemTel
Emergency telephone numbers	+356 2545 6508	1-800-255-3924 (USA, Canada, Puerto Rico, US V.I.)
Other emergency telephone numbers	Not Available	+1-813-248-0585 (International)

## SECTION 2 Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments [1]	Not Applicable
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### 2.2. Label elements

Hazard pictogram(s)	Not Applicable
Signal word	<b>Not Applicable</b>

### Hazard statement(s)

Not Applicable

### Supplementary statement(s)

EUH210	Safety data sheet available on request.
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Lucas Oil Synthetic 5W-30 C3 ECO-V Engine Oil

**Precautionary statement(s) Prevention**

Not Applicable

**Precautionary statement(s) Response**

Not Applicable

**Precautionary statement(s) Storage**

Not Applicable

**Precautionary statement(s) Disposal**

Not Applicable

Material contains lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)\*, 1-decene homopolymer, hydrogenated, paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346), paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346).

**2.3. Other hazards**

<b>lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO &lt;3% w/w by IP 346)*</b>	Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply)
<b>paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346)</b>	Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply)
<b>paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346)</b>	Listed in the Europe Regulation (EC) No 1907/2006 - Annex XVII (Restrictions may apply)

**SECTION 3 Composition / information on ingredients**

**3.1.Substances**

See 'Composition on ingredients' in Section 3.2

**3.2.Mixtures**

1. CAS No 2.EC No 3.Index No 4.REACH No	% [weight]	Name	Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	SCL / M-Factor	Nanoform Particle Characteristics
1. 72623-86-0.* 2.276-737-9 3.649-482-00-X 4.Not Available	10-50	<u>lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO &lt;3% w/w by IP 346)*</u>	Aspiration Hazard Category 1; H304 [1]	Not Available Acute M factor: Not Available Chronic M factor: Not Available	Not Available
1. 68037-01-4* 2.500-183-1 3.Not Available 4.Not Available	10-50	<u>1-decene homopolymer, hydrogenated</u>	Aspiration Hazard Category 1; H304 [1]	Not Available Acute M factor: Not Available Chronic M factor: Not Available	Not Available
1. 64742-55-8.* 2.265-158-7 3.649-468-00-3 4.Not Available	<10	<u>paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346).</u>	Aspiration Hazard Category 1; H304 [1]	Not Available Acute M factor: Not Available Chronic M factor: Not Available	Not Available
1. 64742-65-0.* 2.265-169-7 3.649-474-00-6 4.Not Available	<10	<u>paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346).</u>	Aspiration Hazard Category 1; H304 [1]	Not Available Acute M factor: Not Available Chronic M factor: Not Available	Not Available
1. 68784-26-9* 2.272-234-3 3.Not Available 4.Not Available	<10	<u>dodecylphenol, calcium overbased, sulfurised, carbonated</u>	Hazardous to the Aquatic Environment Long-Term Hazard Category 4; H413 [1]	Not Available Acute M factor: Not Available Chronic M factor: Not Available	Not Available

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 3. Classification drawn from C&L; \* EU IOELVs available; [e] Substance identified as having endocrine disrupting properties

## SECTION 4 First aid measures

### 4.1. Description of first aid measures

<b>Eye Contact</b>	<p>If this product comes in contact with eyes:</p> <ul style="list-style-type: none"> <li>▶ Wash out immediately with water.</li> <li>▶ If irritation continues, seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>
<b>Inhalation</b>	<ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>
<b>Ingestion</b>	<ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>

### 4.2 Most important symptoms and effects, both acute and delayed

See Section 11

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

Treat symptomatically.

## SECTION 5 Firefighting measures

### 5.1. Extinguishing media

- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.
- ▶ Water spray or fog - Large fires only.

### 5.2. Special hazards arising from the substrate or mixture

<b>Fire Incompatibility</b>	None known.
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### 5.3. Advice for firefighters

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear full body protective clothing with breathing apparatus.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> <li>▶ Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>▶ Avoid spraying water onto liquid pools.</li> <li>▶ <b>DO NOT</b> approach containers suspected to be hot.</li> <li>▶ Cool fire exposed containers with water spray from a protected location.</li> <li>▶ If safe to do so, remove containers from path of fire.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>▶ Combustible.</li> <li>▶ Slight fire hazard when exposed to heat or flame.</li> <li>▶ Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>▶ On combustion, may emit irritating/ toxic fumes.</li> <li>▶ May emit acid smoke.</li> <li>▶ Mists containing combustible materials may be explosive.</li> </ul>

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

See section 8

### 6.2. Environmental precautions

See section 12

### 6.3. Methods and material for containment and cleaning up

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>▶ Remove all ignition sources.</li> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> <li>▶ Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>▶ Wipe up.</li> <li>▶ Place in a suitable, labelled container for waste disposal.</li> </ul>
<b>Major Spills</b>	<p>Moderate hazard.</p> <ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> <li>▶ No smoking, naked lights or ignition sources.</li> <li>▶ Increase ventilation.</li> <li>▶ Stop leak if safe to do so.</li> <li>▶ Contain spill with sand, earth or vermiculite.</li> <li>▶ Collect recoverable product into labelled containers for recycling.</li> <li>▶ Absorb remaining product with sand, earth or vermiculite.</li> </ul>

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- ▶ Collect solid residues and seal in labelled drums for disposal.
- ▶ Wash area and prevent runoff into drains.
- ▶ If contamination of drains or waterways occurs, advise emergency services.

6.4. Reference to other sections

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> <li>▶ <b>DO NOT enter confined spaces until atmosphere has been checked.</b></li> <li>▶ Avoid smoking, naked lights or ignition sources.</li> <li>▶ Avoid contact with incompatible materials.</li> <li>▶ When handling, <b>DO NOT eat, drink or smoke.</b></li> <li>▶ Keep containers securely sealed when not in use.</li> <li>▶ Avoid physical damage to containers.</li> <li>▶ Always wash hands with soap and water after handling.</li> <li>▶ Work clothes should be laundered separately.</li> <li>▶ Use good occupational work practice.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> <li>▶ Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.</li> </ul>
<b>Fire and explosion protection</b>	See section 5
<b>Other information</b>	<ul style="list-style-type: none"> <li>▶ Store in original containers.</li> <li>▶ Keep containers securely sealed.</li> <li>▶ No smoking, naked lights or ignition sources.</li> <li>▶ Store in a cool, dry, well-ventilated area.</li> <li>▶ Store away from incompatible materials and foodstuff containers.</li> <li>▶ Protect containers against physical damage and check regularly for leaks.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>

7.2. Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>▶ Metal can or drum</li> <li>▶ Packaging as recommended by manufacturer.</li> <li>▶ Check all containers are clearly labelled and free from leaks.</li> </ul>
<b>Storage incompatibility</b>	Avoid contamination of water, foodstuffs, feed or seed. None known
<b>Hazard categories in accordance with Regulation (EC) No 2012/18/EU (Seveso III)</b>	Not Available
<b>Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of</b>	Not Available

7.3. Specific end use(s)

See section 1.2

SECTION 8 Exposure controls / personal protection

8.1. Control parameters

Ingredient	DNELs Exposure Pattern Worker	PNECs Compartment
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	Dermal 0.97 mg/kg bw/day (Systemic, Chronic) Inhalation 2.73 mg/m <sup>3</sup> (Systemic, Chronic) Inhalation 5.58 mg/m <sup>3</sup> (Local, Chronic) <i>Oral 0.74 mg/kg bw/day (Systemic, Chronic) *</i> <i>Inhalation 1.19 mg/m<sup>3</sup> (Local, Chronic) *</i>	9.33 mg/kg food (Oral)
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	Dermal 0.97 mg/kg bw/day (Systemic, Chronic) Inhalation 2.73 mg/m <sup>3</sup> (Systemic, Chronic) Inhalation 5.58 mg/m <sup>3</sup> (Local, Chronic) <i>Oral 0.74 mg/kg bw/day (Systemic, Chronic) *</i> <i>Inhalation 1.19 mg/m<sup>3</sup> (Local, Chronic) *</i>	9.33 mg/kg food (Oral)
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	Dermal 0.97 mg/kg bw/day (Systemic, Chronic) Inhalation 2.73 mg/m <sup>3</sup> (Systemic, Chronic) Inhalation 5.58 mg/m <sup>3</sup> (Local, Chronic) <i>Oral 0.74 mg/kg bw/day (Systemic, Chronic) *</i> <i>Inhalation 1.19 mg/m<sup>3</sup> (Local, Chronic) *</i>	9.33 mg/kg food (Oral)

\* Values for General Population

Occupational Exposure Limits (OEL)

**INGREDIENT DATA**

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
European Union Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work	lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	Mineral oils that have been used before in internal combustion engines to lubricate and cool the moving parts within the engine	Not Available	Not Available	Not Available	(10) Substantial contribution to the total body burden via dermal exposure possible.
European Union Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work	paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	Mineral oils that have been used before in internal combustion engines to lubricate and cool the moving parts within the engine	Not Available	Not Available	Not Available	(10) Substantial contribution to the total body burden via dermal exposure possible.
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**Emergency Limits**

Ingredient	TEEL-1	TEEL-2	TEEL-3
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	140 mg/m3	1,500 mg/m3	8,900 mg/m3
1-decene homopolymer, hydrogenated	30 mg/m3	330 mg/m3	2,000 mg/m3
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	140 mg/m3	1,500 mg/m3	8,900 mg/m3
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	140 mg/m3	1,500 mg/m3	8,900 mg/m3

Ingredient	Original IDLH	Revised IDLH
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	2,500 mg/m3	Not Available
1-decene homopolymer, hydrogenated	Not Available	Not Available
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	2,500 mg/m3	Not Available
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	2,500 mg/m3	Not Available
dodecylphenol, calcium overbased, sulfurised, carbonated	Not Available	Not Available

**8.2. Exposure controls**

<p><b>8.2.1. Appropriate engineering controls</b></p>	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:                  Process controls which involve changing the way a job activity or process is done to reduce the risk.                  Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.                  Employers may need to use multiple types of controls to prevent employee overexposure.</p> <p>General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.</p> <table border="1"> <thead> <tr> <th>Type of Contaminant:</th> <th>Air Speed:</th> </tr> </thead> <tbody> <tr> <td>solvent, vapours, degreasing etc., evaporating from tank (in still air)</td> <td>0.25-0.5 m/s (50-100 f/min)</td> </tr> <tr> <td>aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)</td> <td>0.5-1 m/s (100-200 f/min.)</td> </tr> <tr> <td>direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)</td> <td>1-2.5 m/s (200-500 f/min)</td> </tr> <tr> <td>grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).</td> <td>2.5-10 m/s (500-2000 f/min.)</td> </tr> </tbody> </table> <p>Within each range the appropriate value depends on:</p> <table border="1"> <tr> <td>Lower end of the range</td> <td>Upper end of the range</td> </tr> </table>	Type of Contaminant:	Air Speed:	solvent, vapours, degreasing etc., evaporating from tank (in still air)	0.25-0.5 m/s (50-100 f/min)	aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)	direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min)	grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion).	2.5-10 m/s (500-2000 f/min.)	Lower end of the range	Upper end of the range
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	<table border="1"> <tr> <td>1: Room air currents minimal or favourable to capture</td> <td>1: Disturbing room air currents</td> </tr> <tr> <td>2: Contaminants of low toxicity or of nuisance value only</td> <td>2: Contaminants of high toxicity</td> </tr> <tr> <td>3: Intermittent, low production.</td> <td>3: High production, heavy use</td> </tr> <tr> <td>4: Large hood or large air mass in motion</td> <td>4: Small hood - local control only</td> </tr> </table> <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p>	1: Room air currents minimal or favourable to capture	1: Disturbing room air currents	2: Contaminants of low toxicity or of nuisance value only	2: Contaminants of high toxicity	3: Intermittent, low production.	3: High production, heavy use	4: Large hood or large air mass in motion	4: Small hood - local control only
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4: Large hood or large air mass in motion	4: Small hood - local control only								
<b>8.2.2. Individual protection measures, such as personal protective equipment</b>									
<b>Eye and face protection</b>	<ul style="list-style-type: none"> <li>▶ Safety glasses with side shields</li> <li>▶ Chemical goggles.</li> <li>▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]</li> </ul>								
<b>Skin protection</b>	See Hand protection below								
<b>Hands/feet protection</b>	<ul style="list-style-type: none"> <li>▶ Wear general protective gloves, eg. light weight rubber gloves.</li> </ul> <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p> <p>Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:</p> <ul style="list-style-type: none"> <li>· frequency and duration of contact,</li> <li>· chemical resistance of glove material,</li> <li>· glove thickness and</li> <li>· dexterity</li> </ul> <p>Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).</p> <ul style="list-style-type: none"> <li>· When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>· When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.</li> <li>· Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.</li> <li>· Contaminated gloves should be replaced.</li> </ul> <p>As defined in ASTM F-739-96 in any application, gloves are rated as:</p> <ul style="list-style-type: none"> <li>· Excellent when breakthrough time &gt; 480 min</li> <li>· Good when breakthrough time &gt; 20 min</li> <li>· Fair when breakthrough time &lt; 20 min</li> <li>· Poor when glove material degrades</li> </ul> <p>For general applications, gloves with a thickness typically greater than 0.35 mm, are recommended.</p> <p>It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.</p> <p>Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers technical data should always be taken into account to ensure selection of the most appropriate glove for the task.</p> <p>Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:</p> <ul style="list-style-type: none"> <li>· Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.</li> <li>· Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential</li> </ul> <p>Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</p>								
<b>Body protection</b>	See Other protection below								
<b>Other protection</b>	<p>No special equipment needed when handling small quantities.</p> <p><b>OTHERWISE:</b></p> <ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ Barrier cream.</li> <li>▶ Eyewash unit.</li> </ul>								

**8.2.3. Environmental exposure controls**

See section 12

**SECTION 9 Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Appearance</b>	Clear and Bright Brown Oil		
<b>Physical state</b>	Liquid	<b>Relative density (Water = 1)</b>	0.848
<b>Odour</b>	Not Available	<b>Partition coefficient n-octanol / water</b>	Not Available
<b>Odour threshold</b>	Not Available	<b>Auto-ignition temperature (°C)</b>	Not Available
<b>pH (as supplied)</b>	Not Available	<b>Decomposition temperature (°C)</b>	Not Available
<b>Melting point / freezing point (°C)</b>	-45	<b>Viscosity (cSt)</b>	70 @ 40°C
<b>Initial boiling point and boiling range (°C)</b>	Not Available	<b>Molecular weight (g/mol)</b>	Not Available
<b>Flash point (°C)</b>	>200	<b>Taste</b>	Not Available
<b>Evaporation rate</b>	Not Available	<b>Explosive properties</b>	Not Available
<b>Flammability</b>	Not Applicable	<b>Oxidising properties</b>	Not Available
<b>Upper Explosive Limit (%)</b>	Not Available	<b>Surface Tension (dyn/cm or mN/m)</b>	Not Available
<b>Lower Explosive Limit (%)</b>	Not Available	<b>Volatile Component (%vol)</b>	Not Available
<b>Vapour pressure (kPa)</b>	Not Available	<b>Gas group</b>	Not Available
<b>Solubility in water</b>	Immiscible	<b>pH as a solution (1%)</b>	Not Available
<b>Vapour density (Air = 1)</b>	Not Available	<b>VOC g/L</b>	Not Available
<b>Nanoform Solubility</b>	Not Available	<b>Nanoform Particle Characteristics</b>	Not Available
<b>Particle Size</b>	Not Available		

**9.2. Other information**

Not Available

**SECTION 10 Stability and reactivity**

<b>10.1.Reactivity</b>	See section 7.2
<b>10.2. Chemical stability</b>	Product is considered stable and hazardous polymerisation will not occur.
<b>10.3. Possibility of hazardous reactions</b>	See section 7.2
<b>10.4. Conditions to avoid</b>	See section 7.2
<b>10.5. Incompatible materials</b>	See section 7.2
<b>10.6. Hazardous decomposition products</b>	See section 5.3

**SECTION 11 Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

<b>Inhaled</b>	The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
<b>Ingestion</b>	The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.
<b>Skin Contact</b>	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
<b>Eye</b>	Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).
<b>Chronic</b>	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

Lucas Oil Synthetic 5W-30 C3 ECO-V Engine Oil	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50: >5000 mg/kg <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
1-decene homopolymer, hydrogenated	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (Rat) LC50: >2500 mg/m3/4h <sup>Λ[2]</sup> Inhalation (Rat) LC50: 4.68 mg/l/1h <sup>[2]</sup>	Eye*(rabbit):0-4/110.0-nonirritant Eye: no adverse effect observed (not irritating) <sup>[1]</sup>

Continued...

	Oral (Rat) LD50: >5000 mg/kg <sup>[2]</sup>	Skin**(rabbit)-0.5/8.0-nonirritant *** [Uniroyal]
	Oral (Rat) LD50: 36000 mg/kg *** <sup>[2]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346)</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50: >5000 mg/kg * <sup>[2]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup> Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346)</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>
	Inhalation (Rat) LC50: 2.18 mg/l4h <sup>[2]</sup> Oral (Rat) LD50: >5000 mg/kg <sup>[2]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>
<b>dodecylphenol, calcium overbased, sulfurised, carbonated</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Dermal (rabbit) LD50: >5000 mg/kg * <sup>[2]</sup>	Not Available
	Inhalation (Rat) LC50: >1670 mg/m3/h * <sup>[2]</sup> Oral (Rat) LD50: >5000 mg/kg * <sup>[2]</sup>	
<b>Legend:</b>	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances	

<b>1-decene homopolymer, hydrogenated</b>	(estimated) * Evidence of conjunctival changes ** No evidence of tissue damage [Inland Vacuum Industries] ^ US EPA HPV Challenge program October 2002 For poly-alpha-olefins (PAOs): PAOs are highly branched, isoparaffinic chemicals produced by oligomerisation of 1-octene, 1-decene and/or 1-dodecene. The crude polyalphaolefin mixture is then distilled into appropriate product fractions to meet specific viscosity specifications and hydrogenated. In existing data, there appears to be no data to show that these structural analogs cause health effects. In addition, there is evidence in the literature that alkanes with 30 or more carbon atoms are unlikely to be absorbed when given by mouth. The physical and chemical properties make it unlikely that significant absorption into the body will occur. There are also no functional groups on PAO molecules that are biologically active. PAOs also have low volatility, so that exposure is unlikely to occur by inhalation. The high viscosity of these substances also makes it hard to generate a high concentration of breathable particles in air. Acute toxicity: Animal testing shows that PAOs have relatively low acute toxicity. Repeat dose toxicity: Animal testing shows that PAOs show low repeat dose toxicity – some increased scaling of the skin occurred, with skin inflammation, after exposure at high doses. Reproductive toxicity: Animal testing suggested that application of PAO to skin did not impair reproductive performance. Genetic toxicity: Testing has not shown any evidence that PAOs cause mutations or chromosomal aberrations. Cancer-causing potentials: Animal testing has not shown any propensity to cause tumours. While alpha-olefin polymers have similar properties to mineral oils, they do not contain polycyclic aromatic hydrocarbons, or other known cancer-causing materials.
<b>paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346)</b>	* Q8 MSDS
<b>paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346)</b>	Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins. The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. The gut cell may play a major role in determining the proportion of hydrocarbon that becomes available to be deposited unchanged in peripheral tissues such as in the body fat stores or the liver.
<b>dodecylphenol, calcium overbased, sulfurised, carbonated</b>	Skin: The key parameter chosen for skin irritation was less than the criteria set out in Directive 67/548/EEC and also Regulation (EC) 1272/2008, therefore classification for skin irritation was not considered to be necessary. Eye: The key parameter chosen for eye irritation was less than the criteria set out in Directive 67/548/EEC and also Regulation (EC) 1272/2008, therefore classification for eye irritation was not considered to be necessary. Sensitisation: The key parameter chosen for skin sensitisation was greater than the criteria set out in Directive 67/548/EEC and also Regulation (EC) 1272/2008, therefore classification for skin sensitisation was not considered to be necessary. Repeat dose toxicity: Dermal: Classification according to Directive 67/548/EEC and Regulation (EC) 1272/2008 could not be determined as the highest dose tested was less than the cut off criteria and was a greater than result. However, it should be noted that there was no signs of toxicity seen at the highest dose tested (250 mg/kg) and it would be unlikely that classification would be necessary as the molecular weight is expected to be >500, and also the high log Kow (9.4) would suggest that entry via the dermal route is unlikely as maximum absorption is generally between log Kow 1 and 2 and therefore the substance is too lipophilic to be readily absorb. Genetic toxicity: The results for the key parameters chosen for genetic toxicity were negative and so the criteria set out in Directive 67/548/EEC and also Regulation (EC) no 1272/2008 do not apply, therefore classification for genetic toxicity was not considered to be necessary. Toxicity to Reproduction: Using the available data the substance is determined to be Reproductive category 2 according to Directive 67/548/EEC and is labelled as Repro. Cat. 2; R60: May impair fertility. In Regulation (EC) no 1272/2008, the test substance is considered to be classified as Repro Category 1B; H360: May damage fertility or the unborn child . Remarks: Classification represents substance as manufactured containing the impurity phenol, dodecyl-, branched. This impurity contributes to the hazards of the substance resulting in classification for reproductive effects. * REACh Dossier For alkaryl sulfonate petroleum additives: Acute toxicity: Existing data indicates relatively low acute toxicity. Animal testing suggested diarrhea and reduced food intake, which is consistent with the detergents in an oil-based vehicle having an irritating effect on the gastrointestinal tract. Subchronic toxicity: Existing data suggests minimal toxicity after chronic exposure by mouth. Repeated skin contact and inhalation in animals caused injury to the skin and the lungs, respectively. Reproductive and Developmental Toxicity: Existing data did not show this group of substances to cause reproductive or developmental toxicity. There was low concern for mutation-causing potential. for alkyl phenol sulfides and alkyl phenate sulfides (typically C15-C18 alpha alkenes, reaction products with sulfurised dodecyl phenol, and their calcium salts):



	<p>In general, highly refined lubricant base oils used in the manufacture of alkyl phenol sulfides and alkyl phenate sulfides may cause slight skin irritation, but otherwise have a low order of acute and chronic toxicity.</p> <p>The substances in this category contain the unreacted alkyl phenol and its calcium salts in varying amounts as an unintended residual resulting from the processes involved in manufacture. These materials have varying levels of residual tetrapropenyl phenol (TPP) present - this substance has demonstrated the potential for toxicity to human health in its own right. It can be stated with some confidence that it is likely to play at least some role in several endpoints. TPP causes adverse systemic effects in repeated-dose toxicity studies in mammals. It also causes adverse effects on reproduction parameters and reproductive organs and adverse effects on the developing foetus in mammals.</p> <p><b>Acute toxicity:</b> Findings from the single and repeated exposure mammalian toxicity studies indicating minimal general toxicity. All category members have a low vapour pressure indicating that inhalation of vapours is not a likely route of exposure for humans. The high lipophilicity, high molecular weight, low aqueous solubility, and the lack of adverse findings following oral and dermal dosing indicate that intestinal absorption or absorption through the skin and distribution in the body is likely to be limited. Metabolism to (non-toxic) metabolites is predicted to occur mostly in the liver. Excretion is expected to be mainly via the urine and faeces.</p> <p>In general, members of the category are not acutely toxic. In the key acute oral toxicity study (OECD TG 401) for each category member, the LD50 ranged from &gt;5000 to &gt;16000 mg/kg. No deaths occurred in these studies, and signs of toxicity included dirty ruffled fur, soft faeces, dark-stained urogenital areas, and red-stained feces at dose levels &gt;5000 mg/kg. The LD50 in the key acute dermal toxicity studies (OECD TG 402) available for most category members ranged from 2000 to 5000 mg/kg. No deaths occurred in these studies, and signs of toxicity included a decrease in food consumption and clear ocular discharge at dose levels &gt;4000 mg/kg. In two acute inhalation studies (similar to OECD 403) in rodents, using two category members, no signs of toxicity occurred at concentrations of up to 1.67 mg/L</p> <p>In the key eye irritation studies (OECD TG 405) for each category member, animal data indicate that these substances cause slight reversible conjunctival irritation: corneal opacity was observed in only one animal in one study and cleared by 24 hours.</p> <p>Slight reversible irritation to the skin was observed in the key skin irritation studies (OECD TG 404) for each member of the category following a 4-hour application to the skin. In general, skin irritation scores were slightly higher in studies where the test substance was applied to the skin for 24 hours in older studies. In two repeated-dose dermal toxicity studies in rats and rabbits application of the test substances over a 28-day period resulted in skin irritation at the application site. However, in 2 human repeated-insult patch tests in which the same test substances were applied three times per week for three weeks, no evidence of skin irritation was observed.</p> <p>Several skin sensitisation studies (OECD TG 406) in guinea pigs have been conducted for each member of the category. Findings in animal studies present a contradictory profile, with positive and negative results in some instances obtained with the same substance following identical protocols. However, negative findings were obtained in two human repeated-insult patch tests. Overall, these substances are not considered to be sensitisers in humans</p> <p><b>Repeated-dose toxicity</b> studies show some evidence of systemic toxicity at the limit dose of 1000 mg/kg bw/day and at 200 mg/kg bw/day in a 2-generation study. The members of this category are not mutagenic in vitro. They are of low concern for developmental toxicity. Alkyl phenate sulfides cause a reduction in fertility in males and female rats, a reduction in mean live litter size, and a reduction in the size of male and female reproductive organs. This may be dependent on the concentration of residual unreacted TPP and CaTPP.</p>
<p><b>lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO &lt;3% w/w by IP 346)* &amp; paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346) &amp; paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346)</b></p>	<p>The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives; The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has undergone, since:</p> <ul style="list-style-type: none"> <li>• The adverse effects of these materials are associated with undesirable components, and</li> <li>• The levels of the undesirable components are inversely related to the degree of processing;</li> <li>• Distillate base oils receiving the same degree or extent of processing will have similar toxicities;</li> <li>• The potential toxicity of residual base oils is independent of the degree of processing the oil receives.</li> <li>• The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing.</li> </ul> <p>Unrefined &amp; mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Testing of residual oils for mutation-causing and cancer-causing potential has shown negative results, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size.</p> <p>Toxicity testing has consistently shown that lubricating base oils have low acute toxicities. Numerous tests have shown that a lubricating base oil's mutagenic and carcinogenic potential correlates with its 3-7 ring polycyclic aromatic compound (PAC) content, and the level of DMSO extractables (e.g. IP346 assay), both characteristics that are directly related to the degree/conditions of processing.</p> <p>For highly and severely refined distillate base oils:</p> <p>In animal studies, the acute, oral, semilethal dose is &gt;5g/kg body weight and the semilethal dose by skin contact is &gt;2g/kg body weight. The semilethal concentration for inhalation is 2.18 to &gt;4 mg/L. The materials have varied from "non-irritating" to "moderately irritating" when tested for skin and eye irritation. Testing for sensitisation has been negative. The effects of repeated exposure vary by species; in animals, effects to the testes and lung have been observed, as well as the formation of granulomas. In animals, these substances have not been found to cause reproductive toxicity or significant increases in birth defects. They are also not considered to cause cancer, mutations or chromosome aberrations.</p>
<p><b>paraffinic distillate, light, hydrotreated (severe) (DMSO &lt;3% w/w by IP 346) &amp; paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO &lt;3% w/w by IP 346)</b></p>	<p>No significant acute toxicological data identified in literature search.</p> <p>The substance is classified by IARC as Group 3:</p> <p><b>NOT</b> classifiable as to its carcinogenicity to humans.</p> <p>Evidence of carcinogenicity may be inadequate or limited in animal testing.</p>

Acute Toxicity	✗	Carcinogenicity	✗
Skin Irritation/Corrosion	✗	Reproductivity	✗
Serious Eye Damage/Irritation	✗	STOT - Single Exposure	✗
Respiratory or Skin sensitisation	✗	STOT - Repeated Exposure	✗
Mutagenicity	✗	Aspiration Hazard	✗

**Legend:** ✗ – Data either not available or does not fill the criteria for classification  
 ✓ – Data available to make classification

**11.2 Information on other hazards**

**11.2.1. Endocrine disrupting properties**

No evidence of endocrine disrupting properties were found in the current literature.

**11.2.2. Other information**

See Section 11.1

**SECTION 12 Ecological information****12.1. Toxicity**

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
Lucas Oil Synthetic 5W-30 C3 ECO-V Engine Oil	Not Available	Not Available	Not Available	Not Available	Not Available
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	EC50	48h	Crustacea	>1000mg/l	1
	NOEC(ECx)	504h	Crustacea	>1mg/l	1
1-decene homopolymer, hydrogenated	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	EC50	48h	Crustacea	>1000mg/l	1
	NOEC(ECx)	504h	Crustacea	>1mg/l	1
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	ErC50	72h	Algae or other aquatic plants	>1000mg/l	1
	EC50	48h	Crustacea	>1000mg/l	1
	NOEC(ECx)	504h	Crustacea	>1mg/l	1
	EC50	96h	Algae or other aquatic plants	>1000mg/l	1
dodecylphenol, calcium overbased, sulfurised, carbonated	EC50	48h	Crustacea	4.9mg/l	1
	LC50	96h	Fish	000mg/l	Not Available
	EC50(ECx)	48h	Crustacea	4.9mg/l	1
	EC50	96h	Algae or other aquatic plants	500mg/l	Not Available
<b>Legend:</b>	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data				

**12.2. Persistence and degradability**

Ingredient	Persistence: Water/Soil	Persistence: Air
1-decene homopolymer, hydrogenated	LOW	LOW

**12.3. Bioaccumulative potential**

Ingredient	Bioaccumulation
1-decene homopolymer, hydrogenated	HIGH (LogKOW = 5.116)

**12.4. Mobility in soil**

Ingredient	Mobility
1-decene homopolymer, hydrogenated	LOW (Log KOC = 1724)

**12.5. Results of PBT and vPvB assessment**

	P	B	T
Relevant available data	Not Available	Not Available	Not Available
PBT	✘	✘	✘
vPvB	✘	✘	✘
PBT Criteria fulfilled?	No		
vPvB	No		

**12.6. Endocrine disrupting properties**

No evidence of endocrine disrupting properties were found in the current literature.

**12.7. Other adverse effects**

No evidence of ozone depleting properties were found in the current literature.

**SECTION 13 Disposal considerations**

**13.1. Waste treatment methods**

<b>Product / Packaging disposal</b>	<p>Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:</p> <ul style="list-style-type: none"> <li>▶ Reduction</li> <li>▶ Reuse</li> <li>▶ Recycling</li> <li>▶ Disposal (if all else fails)</li> </ul> <p>This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.</p> <ul style="list-style-type: none"> <li>▶ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▶ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▶ Where in doubt contact the responsible authority.</li> <li>▶ Recycle wherever possible or consult manufacturer for recycling options.</li> <li>▶ Consult State Land Waste Management Authority for disposal.</li> <li>▶ Bury residue in an authorised landfill.</li> <li>▶ Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul>
	<p><b>Waste treatment options</b> Not Available</p> <p><b>Sewage disposal options</b> Not Available</p>

**SECTION 14 Transport information**

**Labels Required**

<b>Marine Pollutant</b>	NO
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**Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

14.1. UN number or ID number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	Class	Not Applicable
	Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Hazard identification (Kemler)	Not Applicable
	Classification code	Not Applicable
	Hazard Label	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Tunnel Restriction Code	Not Applicable

**Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

14.1. UN number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	ICAO/IATA Class	Not Applicable
	ICAO / IATA Subsidiary Hazard	Not Applicable
	ERG Code	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	Not Applicable
	Cargo Only Packing Instructions	Not Applicable
	Cargo Only Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Packing Instructions	Not Applicable
	Passenger and Cargo Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable

Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable
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**Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

14.1. UN number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	IMDG Class	Not Applicable
	IMDG Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	Not Applicable
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

**Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

14.1. UN number	Not Applicable	
14.2. UN proper shipping name	Not Applicable	
14.3. Transport hazard class(es)	Not Applicable	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Classification code	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

**14.7. Maritime transport in bulk according to IMO instruments**

**14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code**  
Not Applicable

**14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code**

Product name	Group
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	Not Available
1-decene homopolymer, hydrogenated	Not Available
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	Not Available
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	Not Available
dodecylphenol, calcium overbased, sulfurised, carbonated	Not Available

**14.7.3. Transport in bulk in accordance with the IGC Code**

Product name	Ship Type
lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*	Not Available
1-decene homopolymer, hydrogenated	Not Available
paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346)	Not Available
paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346)	Not Available

Product name	Ship Type
dodecylphenol, calcium overbased, sulfurised, carbonated	Not Available

## SECTION 15 Regulatory information

### 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

#### lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)\* is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: Category 1 B

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

European Union Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

#### 1-decene homopolymer, hydrogenated is found on the following regulatory lists

Europe EC Inventory

#### paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346) is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: Category 1 B

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

European Union Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

#### paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346) is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

EU REACH Regulation (EC) No 1907/2006 - Annex XVII (Appendix 2) Carcinogens: Category 1 B

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

European Union Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

#### dodecylphenol, calcium overbased, sulfurised, carbonated is found on the following regulatory lists

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

### Additional Regulatory Information

Not Applicable

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

### Information according to 2012/18/EU (Seveso III):

Seveso Category	Not Available

### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

### National Inventory Status

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*; 1-decene homopolymer, hydrogenated; paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346); paraffinic distillate, heavy, solvent-dewaxed (severe) (DMSO <3% w/w by IP 346); dodecylphenol, calcium overbased, sulfurised, carbonated)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (dodecylphenol, calcium overbased, sulfurised, carbonated)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes

National Inventory	Status
Mexico - INSQ	No (paraffinic distillate, light, hydrotreated (severe) (DMSO <3% w/w by IP 346); dodecylphenol, calcium overbased, sulfurised, carbonated)
Vietnam - NCI	Yes
Russia - FBEPH	No (lubricating oils, petroleum C15-30 hydrotreated neutral (DMSO <3% w/w by IP 346)*; dodecylphenol, calcium overbased, sulfurised, carbonated)
<b>Legend:</b>	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

**SECTION 16 Other information**

<b>Revision Date</b>	22/07/2024
<b>Initial Date</b>	03/04/2024

**Full text Risk and Hazard codes**

<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H413</b>	May cause long lasting harmful effects to aquatic life.

**SDS Version Summary**

Version	Date of Update	Sections Updated
1.2	22/07/2024	Toxicological information - Acute Health (skin), Physical and chemical properties - Appearance, Hazards identification - Classification, Ecological Information - Environmental, Exposure controls / personal protection - Exposure Standard, Firefighting measures - Fire Fighter (fire/explosion hazard), First Aid measures - First Aid (skin), Handling and storage - Handling Procedure, Composition / information on ingredients - Ingredients, Stability and reactivity - Instability Condition, Exposure controls / personal protection - Personal Protection (other), Exposure controls / personal protection - Personal Protection (eye), Exposure controls / personal protection - Personal Protection (hands/feet), Handling and storage - Storage (storage incompatibility)

**Other information**

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

For detailed advice on Personal Protective Equipment, refer to the following EU CEN Standards:

- EN 166 Personal eye-protection
- EN 340 Protective clothing
- EN 374 Protective gloves against chemicals and micro-organisms
- EN 13832 Footwear protecting against chemicals
- EN 133 Respiratory protective devices

**Definitions and abbreviations**

- ▶ PC - TWA: Permissible Concentration-Time Weighted Average
- ▶ PC - STEL: Permissible Concentration-Short Term Exposure Limit
- ▶ IARC: International Agency for Research on Cancer
- ▶ ACGIH: American Conference of Governmental Industrial Hygienists
- ▶ STEL: Short Term Exposure Limit
- ▶ TEEL: Temporary Emergency Exposure Limit,
- ▶ IDLH: Immediately Dangerous to Life or Health Concentrations
- ▶ ES: Exposure Standard
- ▶ OSF: Odour Safety Factor
- ▶ NOAEL: No Observed Adverse Effect Level
- ▶ LOAEL: Lowest Observed Adverse Effect Level
- ▶ TLV: Threshold Limit Value
- ▶ LOD: Limit Of Detection
- ▶ OTV: Odour Threshold Value
- ▶ BCF: BioConcentration Factors
- ▶ BEI: Biological Exposure Index
- ▶ DNEL: Derived No-Effect Level
- ▶ PNEC: Predicted no-effect concentration
  
- ▶ AIIC: Australian Inventory of Industrial Chemicals
- ▶ DSL: Domestic Substances List
- ▶ NDSL: Non-Domestic Substances List
- ▶ IECSC: Inventory of Existing Chemical Substance in China
- ▶ EINECS: European Inventory of Existing Commercial chemical Substances
- ▶ ELINCS: European List of Notified Chemical Substances
- ▶ NLP: No-Longer Polymers
- ▶ ENCS: Existing and New Chemical Substances Inventory
- ▶ KECI: Korea Existing Chemicals Inventory
- ▶ NZIoC: New Zealand Inventory of Chemicals
- ▶ PICCS: Philippine Inventory of Chemicals and Chemical Substances
- ▶ TSCA: Toxic Substances Control Act
- ▶ TCSI: Taiwan Chemical Substance Inventory
- ▶ INSQ: Inventario Nacional de Sustancias Químicas
- ▶ NCI: National Chemical Inventory
- ▶ FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]**

Classification according to regulation (EC) No 1272/2008 [CLP] and amendments	Classification Procedure
, EUH210	Calculation method

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