



# MATERIAL SAFETY DATA SHEET

19<sup>th</sup> November 2020

## CLEAR LAMP OIL

### SECTION 1: IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY

#### 1.1 Product Identifier

<b>Trade Name</b>	<b>Clear Lamp Oil (Indoor)</b>
<b>REACH No.</b>	01-2119475608-26-0000
<b>Substance name (REACH/CLP)</b>	Hydrocarbons, C10-C13, n-alkanes, <2% aromatics

#### 1.2 Relevant identified uses :

Manufacture of substance - Industrial  
 Use in Cleaning Agents - Consumer  
 Metal working fluids/rolling oils - Industrial  
 Metal working fluids/rolling oils - Professional  
 Use as binders and release agents - Industrial  
 Use as binders and release agents - Professional  
 Use in Agrochemicals uses - Professional  
 Use in Agrochemicals uses - Consumer  
 Rubber production and processing - Industrial  
 Polymer processing - Industrial  
 Use as an intermediate - Industrial  
 Lubricants - Industrial  
 Lubricants (Low release) - Professional  
 Lubricants (high release) - Professional  
 Lubricants (Low release) - Consumer  
 Lubricants (high release) - Consumer  
 Use in laboratories - Industrial  
 Use in laboratories - Professional  
 Water treatment chemicals - Industrial  
 Water treatment chemicals - Professional  
 Explosives manufacture and use - Professional  
 Distribution of substance - Industrial  
 Functional Fluids - Industrial  
 Functional Fluids - Professional  
 Other Consumer Uses - Consumer  
 Formulation and (re)packing of substances and mixtures - Industrial  
 Uses in Coatings - Industrial  
 Uses in Coatings - Professional  
 Uses in Coatings - Consumer

#### 1.3 Details of the supplier of the safety data sheet

<b>Supplier:</b>	R.K. & J. Jones Limited
<b>Address:</b>	Southery Road, Feltwell Thetford, Norfolk, IP26 4EH, UK.
<b>Telephone:</b>	01842 828101
<b>Emergency telephone number:</b>	01223 968282

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification according to Regulation (EC) No 1272/2008**

Aspiration toxicant Category 1

H304: May be fatal if swallowed and enters airways

**2.2 Label elements**

Labelling elements according to REGULATION (EC) No 1272/2008

**Pictograms****Signal word**

Danger

**Hazard statements**

H304

May be fatal if swallowed and enters airways

**Precautionary statements**

P301+P310

IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician

P331

Do NOT induce vomiting

P405

Store locked up

P501

Dispose of contents/container in accordance with local regulations.

**Supplemental Hazard Statements**

EUH066

Repeated exposure may cause skin dryness or cracking.

**2.3 Other hazards**

Physical / Chemical Hazards:

No significant hazards.

Health Hazards:

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

Environmental Hazards:

No significant hazards. Material does not meet the criteria for PBT or vPvB in accordance with REACH Annex XIII.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

3.1: This material is defined as a substance:

Name	EC or EINECS	Registration	Concentration	GHS/CLP classification
Hydrocarbons, C10-C13, n-alkanes, < 2% aromatics	929-018-5	01-2119475608-26	100%	Asp. Tox. 1 H304, EUH066

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

- Skin:** Wash skin thoroughly with soap and water after contact. Change contaminated clothing and dry-clean and launder before re-use.
- Eyes:** Wash eyes thoroughly with copious quantities of water, ensuring eyelids are held open. Obtain medical advice if any pain or redness develops or persists.
- Ingestion:** If contamination of the mouth occurs, wash it out thoroughly with water. Obtain medical advice if large amounts are swallowed - do not induce vomiting.
- Inhalation:** If inhalation of mists, fumes or vapour causes irritation to the nose or throat, or coughing, remove to fresh air. Obtain medical advice if symptoms persist.

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

- Skin:** No known significant effects or critical hazards.
- Eyes:** No known significant effects or critical hazards.
- Ingestion:** No known significant effects or critical hazards.
- Inhalation:** May be fatal if swallowed and enters airways

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

**Note to physician:** Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific Treatments:** No specific treatment

## SECTION 5 : FIRE FIGHTING MEASURES

### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire. Foam (Specifically trained personnel only). Water fog (Specifically trained personnel only). Dry chemical powder. Carbon dioxide. Other inert gases (subject to regulations)  
Sand or earth.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture:** In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustions products:** Carbon oxides (CO, CO<sub>2</sub>), smoke and irritating vapours as products of incomplete combustion.

### 5.3 Advice for firefighters

**Special precautions for fire-fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**Additional information:** Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment

**For non-emergency personnel:** Eliminate all sources of ignition in vicinity of spilled material. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material.

**For emergency responders:** If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up

**Small spill:** Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill:** Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

### 6.4 References to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**Protective measures:** Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures.

**Advice on general occupational hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area (away from sources of ignition), away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

**7.3 Specific end use(s)** Section 1 informs about identified end-uses. No industrial or sector specific guidance available.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Exposure limits

Limit value type (country of origin)	Substance name	Occupational exposure limit value		Recommended control process	Peak limitation	Source
		Long term (8h)	short term (15 min)			
AGW (DE)	Hydrocarbon mixture, use as solvent (hydrocarbon solvent), additive free C9-C15 Aliphatics	600 mg/m <sup>3</sup>			2 (II)	TRGS 900 RCP method
other countries	GESTIS-International Limit Values <a href="http://limitvalue.ifa.dguv.de/">http://limitvalue.ifa.dguv.de/</a>					

Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s):

UK: Health and Safety Executive (HSE)

**Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)**

N/A

#### PREDICTED NO EFFECT CONCENTRATION (PNEC)

Note: No PNEC available.

### 8.2 Exposure controls

#### Engineering Controls

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider: No special requirements under ordinary conditions of use and with adequate ventilation.

#### Personal Protection

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

#### Respiratory protection:

If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

#### Hand protection

Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Nitrile rubber/Nitrile latex - NBR (0,35 mm)  
Fluoro carbon rubber - FKM (0,4 mm)  
Following materials are unsuitable for protective gloves:

Natural rubber/Natural latex - NR  
Polychloroprene - CR  
Butyl rubber - Butyl  
Polyvinyl chloride - PVC

**Eye Protection** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body protection** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include: No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

**8.3 Environmental Exposure Controls** Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 Information on basic physical and chemical properties

**Appearance:** Colourless Liquid

**Odour:** Mild

**Odour threshold:** No data available

**pH:** Not technically feasible

**Melting Point:** Not technically feasible

**Freezing Point:** No data available

**Initial Boiling Point / and Boiling Range:** 190 - 222°C DIN EN ISO 3405

**Flash Point :** 70°C DIN EN ISO 2719

**Evaporation Rate:** Not Established

**Flammability (solid,gas):** No data available

**Upper/Lower flammability of explosive limits:** LEL 0,6 Vol.% / UEL 7,0 Vol.%

**Vapour Pressure:** < 1 hPa (calculated)

**Vapour Density:** > 1 at 1013 hPa

**Density at 15°C:** 749,5 kg/m<sup>3</sup> DIN 51757

**Solubility in water:** Nearly insoluble

**Partition coefficient:** No data available

**Auto-ignition temperature:** > 200°C

**Decomposition temperature:** No data available

**Explosive properties:** Not explosive, but explosive vapour / air mixtures can be produced

**Oxidising properties:** None

**Viscosity at 40°C:** < 2 cSt ASTM D7042-04

### 9.2 Other data

**Pour Point:** - 10°C

**SECTION 10: STABILITY AND REACTIVITY**

<b>10.1 Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	The product is stable under normal conditions
<b>10.3 Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	No specific data.
<b>10.5 Incompatible materials</b>	Reactive with oxidising agents.
<b>10.6 Hazardous decomposition products</b>	Material does not decompose at ambient temperatures.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

This material is characterised as non-toxic because it shows the following characteristics:

- (a) Acute Toxicity (oral):** LD50 > 5000mg/kg (Rat)
- (b) Skin corrosion/irritation:** Non Irritant (rabbit) LD50 > 5000 mg/kg
- (c) Serious eye damage/irritation:** Repeated or prolonged contact spray, mist or vapours may cause eye irritation but no permanent damage
- (d) Respiratory or skin sensitisation:** Not expected to be a respiratory sensitizer or a skin sensitizer based on available data .
- (e) Germ cell mutagenicity:** Not expected to be a germ cell mutagen based on available data.
- (f) Carcinogenicity:** Not expected to cause cancer based on available data.
- (g) Reproductive toxicity:** Not expected to be a reproductive toxicant based on available data.
- (h) Specific Target Organ Toxicity (STOT)-single exposure:** Not expected to cause organ damage from a single exposure based on available data
- (i) STOT-repeated exposure:** Not expected to cause organ damage from prolonged or repeated exposure based on available data.
- (j) Aspiration hazard:** May be fatal if swallowed and enters airways based on physico-chemical properties of the material.

**Information on the likely routes of exposure:** Oral, Dermal, Inhalation.

**Potential acute health effects:**

Eye contact : No known significant effects or critical hazards.  
 Inhalation : No known significant effects or critical hazards.  
 Ingestion : May be fatal if swallowed and enters airways.  
 Skin contact: May cause skin dryness and irritation.

**Symptoms related to the physical, chemical and toxicological characteristics:**

**Inhalation:** No specific data.

**Eye contact:** No specific data

**Skin contact:** Adverse symptoms may include the following:

Irritation, dryness, cracking

**Ingestion:** Adverse symptoms may include the following: nausea or vomiting

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure:**

**Potential immediate effects:** Not available.

**Potential delayed effects:** Not available.

**Long term exposure:**

**Potential immediate effects:** Not available.

**Potential delayed effects:** Not available.

**Potential delayed effects:** Not available.

**Long term exposure:**

**Potential immediate effects:** Not available.

**Potential delayed effects:** Not available.

**Potential chronic health effects:** Not available.

**Conclusion/Summary:** Not available.

**General:** Prolonged or repeated contact can lead to irritation, cracking and/or dermatitis.

**Carcinogenicity:** No known significant effects or critical hazards.

**Mutagenicity:** No known significant effects or critical hazards.

**Teratogenicity:** No known significant effects or critical hazards.

**Developmental effects:** No known significant effects or critical hazards.

**Fertility effects:** No known significant effects or critical hazards.

**Other information:** Not available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

Material -- Not expected to be harmful to aquatic organisms.

#### Ecological Data (Acute)

Species	Effect dose	time	Medium
Daphnia magna	EL50 > 1.000 mg/l	48 h	structurally similar material
Oncorhynchus mykiss	LL50 > 1.000 mg/l	96 h	structurally similar material
Pseudokirchnerella subcapitata	EL50 > 1.000 mg/l	72 h	structurally similar material
Pseudokirchnerella subcapitata	NOELR 1.000 mg/l	72 h	structurally similar material

#### Ecological Data (Chronic)

Species	Effect dose	time	Medium
Daphnia magna	NOELR 0,361 mg/l	21 d	structurally similar material

### 12.2 Persistence and degradability

Readily biodegradable

#### Persistence, Degradability and Bioaccumulation Potential

	Duration	Test Results: Basis
Readily Biodegradability	28 day(s)	77%

### 12.3 Bioaccumulative potential

No data

### 12.4 Mobility in soil

Leaking material can soak in the sediment layer and cause groundwater contamination.

### 12.5 Persistence, Bioaccumulation and Toxicity for Substance(s)

PBT : No

vPvB : Not applicable

### 12.6 Other adverse effects

No adverse effects are expected.

## SECTION 13: DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.



### 13.1 Waste treatment methods

**Methods of disposal:** The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Hazardous waste:** The classification of the product may meet the criteria for a hazardous waste. The waste code must be assigned by the user, preferably in consultation with the (environmental) authorities concerned. Hazardous waste according to Directive 2008/98/EC.

## SECTION 14 : TRANSPORT INFORMATION

**14.1 UN number:** Not Regulated

**14.2 UN Proper shipping name:** N/A

**14.3 Transport hazard class(es):** N/A

**14.4 Packing Group:** N/A

**14.5 Environmental hazards:** None

**14.6 Special precautions for user**

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**  
NOXIOUS LIQUID, N.F.,(7) N.O.S., Shipping type required: 3. Pollution Category: Y

## SECTION 15: REGULATORY INFORMATION

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

**Applicable EU Directives and Regulations:**

Regulation EC No 1907/2006 [on the Registration, Evaluation, Authorisation and Restriction of Chemicals and amendments thereto]

Regulation EC No 1272/2008 [on classification, labelling and packaging of substances and mixtures.. and amendments thereto]

**Regulatory Status and Applicable Laws and Regulations**

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, IECSC, KECI, PICCS, TSCA

**15.2 Chemical Safety Assessment:** Completed

**SECTION 16 : OTHER HEALTH AND SAFETY INFORMATION****IDENTIFIED USES:**

Manufacture of substance (PROC1, PROC15, PROC2, PROC3, PROC4, PROC8a, PROC8b, SU10, SU3, SU8, SU9)

Distribution of substance (PROC1, PROC15, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, SU3, SU8, SU9)

Use as an intermediate (PROC1, PROC15, PROC2, PROC3, PROC4, PROC8a, PROC8b, SU3, SU8, SU9)

Formulation and (re)packing of substances and mixtures (PROC1, PROC14, PROC15, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, SU10, SU3)

Use in Coatings - Industrial (PROC1, PROC10, PROC13, PROC14, PROC15, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, SU3)

Use in Cleaning Agents - Industrial (PROC1, PROC10, PROC13, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, SU3, )

Lubricants - Industrial (PROC1, PROC10, PROC13, PROC17, PROC18, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, SU3)

Metal working fluids / rolling oils - Industrial (PROC1, PROC10, PROC13, PROC17, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, SU3)

Use as binders and release agents - Industrial (PROC1, PROC10, PROC13, PROC14, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8a, PROC8b, SU3)

Functional Fluids - Industrial (PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, SU3)

Use in laboratories - Industrial (PROC15, SU3)

Rubber production and processing (PROC1, PROC13, PROC14, PROC15, PROC2, PROC21, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, SU10)

Polymer processing - Industrial (PROC1, PROC13, PROC14, PROC2, PROC21, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, SU10, SU3)

Water treatment chemicals - Industrial (PROC1, PROC13, PROC2, PROC3, PROC4, PROC8a, PROC8b, SU3)

Use in Coatings - Professional (PROC1, PROC10, PROC11, PROC13, PROC15, PROC19, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, SU22)

Use in Cleaning Agents - Professional (PROC1, PROC10, PROC11, PROC13, PROC19, PROC2, PROC3, PROC4, PROC8a, PROC8b, SU22)

Lubricants - Professional (Low Release) (PROC1, PROC10, PROC11, PROC13, PROC17, PROC18, PROC2, PROC20, PROC3, PROC4, PROC8a, PROC8b, PROC9, SU22)

Lubricants - Professional (High Release) (PROC1, PROC10, PROC11, PROC13, PROC17, PROC18, PROC2, PROC20, PROC3, PROC4, PROC8a, PROC8b, PROC9, SU22)

Metal working fluids / rolling oils - Professional (PROC1, PROC10, PROC11, PROC13, PROC17, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, SU22)

Use as binders and release agents - Professional (PROC1, PROC10, PROC11, PROC14, PROC2, PROC3, PROC4, PROC6, PROC8a, PROC8b, SU22)

Agrochemical uses - Professional (PROC1, PROC11, PROC13, PROC2, PROC4, PROC8a, PROC8b, SU22)

Functional Fluids - Professional (PROC1, PROC2, PROC20, PROC3, PROC8a, PROC9, SU22)

Use in laboratories - Professional (PROC15, SU22)

Explosives manufacture & use (PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, SU22)

Water treatment chemicals - Professional (PROC1, PROC13, PROC2, PROC3, PROC4, PROC8a, PROC8b, SU22)

Use in Coatings - Consumer (PC01, SU21)

Use in Cleaning Agents - Consumer (PC04, SU21)

Lubricants - Consumer (Low Release) (PC01, SU21)

Lubricants - Consumer (High Release) (PC01, SU21)

Agrochemical uses - Consumer (PC12, SU21)

Use as a fuel - Consumer (PC13, SU21)

Other Consumer Uses (PC28, PC39)

**REFERENCES:** Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, ECHA database, publications from other trade associations, such as the EU Hydrocarbon Solvents REACH Consortium, U.S. HPV Program Robust Summaries, the EU IUCLID Data Base, U.S. NTP publications, and other sources, as appropriate.

**List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet:**

<b>Acronym</b>	<b>Full text</b>
N/A	Not applicable
N/D	Not determined
NE	Not established
VOC	Volatile Organic Compound
AICS	Australian Inventory of Chemical Substances
AIHA WEEL	American Industrial Hygiene Association Work- place Environmental Exposure Limits
ASTM	ASTM International, originally known as the American Society for Testing and Materials (ASTM)
DSL	Domestic Substance List (Canada)
EINECS	European Inventory of Existing Commercial Sub- stances
ELINCS	European List of Notified Chemical Substances
ENCS	Existing and new Chemical Substances (Japa- nese inventory)
IECSC	Inventory of Existing Chemical Substances in China
KECI	Korean Existing Chemicals Inventory
NDSL	Non-Domestic Substances List (Canada)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TLV	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TSCA	Toxic Substances Control Act (U.S. inventory)
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
LC	Lethal Concentration
LD	Lethal Dose
LL	Lethal Loading
EC	Effective Concentration
EL	Effective Loading
NOEC	No Observable Effect Concentration
NOELR	No Observable Effect Loading Rate

**REASON FOR REVISION:**

In accordance Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regu-  
lation (EU) 2015/830 COMMISSION REGULATION (EU) 2015/830.

Section 3: Product identifier updated.

REVISION DATE: 09 February 2018

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date of compilation specified above. Any information contained herein has been reviewed. However, no warranty or representation, express or implied, is made as to the accuracy or completeness of the data and information contained in this data sheet. Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorisation, given or implied, to practice any patented without a valid licence. SIP Ltd shall not be responsible for any damage or injury resulting from the abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.

**ANNEX**

<b>Section 1 Exposure Scenario Titles</b>	
<b>Titles:</b>	
Manufacture of substance, Distribution of substance, Use as an intermediate, Formulation and (re)packing of substances and mixtures, Use in Coatings – Industrial, Use in Cleaning Agents – Industrial, Lubricants – Industrial, Metal working fluids / rolling oils – Industrial, Use as binders and release agents – Industrial, Functional Fluids – Industrial, Use in laboratories – Industrial, Rubber production and processing, Polymer processing – Industrial, Water treatment chemicals – Industrial, Use in Coatings – Professional, Use in Cleaning Agents – Professional, Lubricants - Professional (Low Release), Lubricants - Professional (High Release), Metal working fluids / rolling oils – Professional, Use as binders and release agents – Professional, Agrochemical uses – Professional, Functional Fluids – Professional, Use in laboratories – Professional, Explosives manufacture & use, Water treatment chemicals – Professional, Use in Coatings – Consumer, Use in Cleaning Agents – Consumer, Lubricants - Consumer (Low Release), Lubricants - Consumer (High Release), Agrochemical uses – Consumer, Use as a fuel – Consumer, Other Consumer Uses.	
<b>Use Descriptor</b>	
Sector(s) of Use	SU10, SU3, SU8, SU9, SU21, SU22
Process Categories	PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC 9, PROC 10, PROC11, PROC 13, PROC14, PROC15, PROC16, PROC17, PROC18, PROC19, PROC20, PROC21
Environmental Release Categories	ERC1, ERC2, ERC3, ERC4, ERC5, ERC6A, ERC6B, ERC6C, ERC6D, ERC7, ERC8A, ERC8D, ERC8E, ERC8F, ERC9A, ERC9B
<b>Processes, tasks, activities covered</b>	
Manufacture of the substance or use as an intermediate, process chemical or extracting agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).	
Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading, distribution and associated laboratory activities.	
Use as an intermediate (not related to Strictly Controlled Conditions). Includes incidental exposures during recycling/recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).	
Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, palletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.	
Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.	
Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.	
Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes.	
Covers the use in formulated MWFs (MWFs)/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils.	
Covers the use as binders and release agents including material transfers, mixing, application (including spraying and brushing) and handling of waste.	
Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers.	
Use of the substance within laboratory settings, including material transfers and equipment cleaning.	
Manufacture of tyres and general rubber articles, including processing of raw (uncured) rubber, handling and mixing of rubber additives, vulcanising, cooling and finishing.	
Processing of formulated polymers including material transfers, additives handling (e.g. pigments, stabilisers, fillers,	

plasticisers, etc.), moulding, curing and forming activities, material re-works, storage and associated maintenance.
Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems
Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation) and equipment cleaning, maintenance and associated laboratory activities.
Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand).
Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.
Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.
Covers the use in formulated MWFs (metal working fluids)/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils
Covers the use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste.
Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging; including equipment clean-downs and disposal.
Use as functional fluids e.g. cable oils, transfer oils, insulators, refrigerants, hydraulic fluids in closed professional equipment including incidental exposures during maintenance and related material transfers.
Use of small quantities within laboratory settings, including material transfers and equipment cleaning.
Covers exposures arising from the manufacture and use of slurry explosives (including materials transfer, mixing and charging) and equipment cleaning.
Covers the use of the substance for the treatment of water in open and closed systems.
Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.
Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.
Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.
Covers the consumer use of agrochemicals in liquid and solid forms.
Covers consumer uses in liquid fuels.
Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: For cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.
<b>Section 2 Operational conditions and risk management measures</b>
<b>Section 2.1 Control of worker exposure</b>
<b>Product Characteristic</b>
Liquid
<b>Duration, frequency and amount</b>
Covers daily exposures up to 8 hours (unless stated differently)[G2]
Covers percentage substance in the product up to 100 %[G13]
<b>Other given operational conditions affecting workers exposure</b>
Assumes a good basic standard of occupational hygiene is implemented [G1]
<b>Contributing Scenarios/Specific Risk Management Measures and Operating Conditions</b>
(only required controls to demonstrate safe use listed)
<b>General measures (Aspiration Hazard)</b>
The H304 risk phrase (May be fatal if swallowed and enters airways) relates to potential for aspiration, a non-quantifiable hazard determined by physio-chemical properties (i.e. viscosity) that can occur during ingestion and also if it is vomited following ingestion. A DNEL cannot be derived and is not applicable. Risks from the physicochemical hazards of substances can be controlled by implementing risk management measures. For substances classified as H304, the following measures need to be implemented to control the aspiration hazard.
<b>Do not ingest. If swallowed then seek immediate medical attention. Do NOT induce vomiting.</b>
<b>Section 2.2 Control of environmental exposure</b>
<b>Product characteristics</b>
Not applicable; product is not hazardous for the environment

<b>Duration, frequency and amount</b>
Not applicable; product is not hazardous for the environment
<b>Environmental factors not influenced by risk management</b>
Not applicable; product is not hazardous for the environment
<b>Other given operational conditions affecting environmental exposure</b>
Not applicable; product is not hazardous for the environment
<b>Technical conditions and measures at process level (source) to prevent release</b>
Not applicable; product is not hazardous for the environment
<b>Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil</b>
Not applicable; product is not hazardous for the environment
<b>Organisation measures to prevent/limit release from site</b>
Not applicable; product is not hazardous for the environment
<b>Conditions and measures related to municipal sewage treatment plant</b>
Not applicable; product is not hazardous for the environment
<b>Conditions and measures related to external treatment of waste for disposal</b>
Not applicable; product is not hazardous for the environment
<b>Conditions and measures related to external recovery of waste</b>
Not applicable; product is not hazardous for the environment
<b>Section 3 Exposure Estimation</b>
<b>3.1. Health</b>
Not applicable; available hazard data do not support the need for a DNEL to be established for other health effects.
<b>3.2. Environment</b>
Not applicable; product is not hazardous for the environment
<b>Section 4 Guidance to check compliance with the Exposure Scenario</b>
<b>4.1. Health</b>
Available hazard data do not support the need for a DNEL to be established for other health effects.[G36] Risk Management Measures are based on qualitative risk characterisation. [G37]
<b>4.2. Environment</b>
Not applicable; product is not hazardous for the environment