



# SAFETY DATA SHEET

Revision Date: 08-19-2015

Version 2

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1.

#### Product identifier

**Product Code(s):** 41002429-M  
**Product Code(s) (DE):** - 80130000  
**Product Code(s) (IT):** - M2429S8C  
**Product Code(s) (ES):** - 400630  
**Product Name** MACRON 2429 S 8  
**Product Registration number**  
**Denmark** -  
**Norway** -  
**Sweden** -  
**EC #** Not Applicable  
**Pure substance/preparation** Contains Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C), 1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole

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

**Recommended use** Neat Metalworking Oil

**Uses advised against** Any other purpose.

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

#### **Manufacturer, Importer, Supplier**

Houghton plc  
Beacon Road  
Trafford Park  
Manchester  
M17 1AF  
Tel: +44 (0)161 874 5000  
E-mail: MSDS@uk.houghtonglobal.com

Houghton S.A.S.  
604 Bd Albert Camus,  
BP 60041  
69652 Villefranche sur saone  
France  
Tel: (0) 4 74 65 65 00  
Fax: (0) 4 74 60 08 44

Houghton Iberica S.A.  
Pol. Ind. Can Salvatella-TorreMateu  
08210 Barbera del Valles  
Barcelona  
SPAIN  
Tel: +(34 93) 718 85 00  
Fax: +(34 93) 718 93 00  
msds.es@houghtonintl.com

Houghton Deutschland GmbH  
Giselherstr. 57. D-44319.  
Dortmund  
Deutschland  
Tel: +49 (0) 231/9277-0.  
Fax: +49 (0)231/9277-120  
MSDS@houghtonintl.com

Ragione Sociale: Houghton Italia S.p.A.  
Indirizzo: Via Postiglione, 30  
10024 Moncalieri (TO)  
ITALY  
Telefono: (+39) 011 6475811.  
Fax: (+39) 0116472778.  
ITTN-MSDS@houghtonintl.com

Houghton Benelux  
Meerpaal 12 A. NL - 4904.SK Oosterhout.  
Telefoon: +31 162458400  
Fax: +31 162 458205  
Email: customerservice.nl@houghtonintl.com

Houghton Sverige AB  
La Cours Gata 4  
252 31 Helsingborg  
Sverige  
Tel: +46 42 29 55 10  
E-mail: info.se@houghtonintl.com

Houghton Polska SP z.o.o  
UlKapelanka 17  
30-347 Krakow  
Poland  
+48 122665240  
info@houghton.com.pl

HOUGHTON EUROPE N.V Siviluike Suomessa  
Lautamiehentie 3  
02770 ESPOO  
Puh. 00-8596 395  
Fax. 09-8596 396  
LY: 1957249-8  
E-mail: info@houghton.fi

Houghton Danmark A/S  
Energivej 3  
DK-4180 Sorø  
Danmark  
Tel: +45 45 85 23 00  
E-mail: houghton@houghton.dk

Mento AS  
Kontinentalveien  
Postboks 44  
4098 Tananger  
Norway  
Tel: +47 51 64 86 00  
www.Mento.no

Houghton Ukraine Ltd  
Ukraine, Kiev 04213  
13, Prirrechnaya St.  
Phone: +38 (044) 360-10-24  
Fax: +38 (044) 426-27-76

Houghton CZ s.r.o.  
Bartošova 3  
602 00 Brno  
Czech Republic  
Phone: +420 542 213 332  
office@houghton.cz

Houghton Romania  
2A, Jiului Street  
4th Floor / Room 2  
013219 Bucharest  
Phone: +40 21 667 06 15  
Fax: +40 21 667 09 70

Houghton Kimya San. A.Ş  
Kosuyolu Mah  
Asma Dall Sok  
No: 1434718 Kadıköy  
İstanbul  
Türkiye  
Phone Number: +90 216 325 15 15

#### 1.4. Emergency telephone number

3E Company: (+)1 760 476 3961 ( Code 333938 )

<b>Austria</b>	Notfall-Telefonnummer +43 (0) 1 406 4343
<b>Belgium</b>	Telefoonnummer voor +32 (0)70 245 245
<b>Bulgaria</b>	Телефон за спешни случаи +359 2 9154 409
<b>Croatia</b>	Telefon za izvanredna stanja +385 1 2348 342
<b>Czech Republic</b>	Telefonní číslo pro naléhavé situace +420 224 919 293
<b>Denmark</b>	Ring til Giftlinjen på +45 82 12 12 12
<b>Estonia</b>	Mürgistusteabekeskuse +372 626 93 90
<b>Finland</b>	Hätäpuhelinumero +358 09 471 977
<b>France</b>	Numéro d'appel d'urgence +33 (0)1 45 42 5959
<b>Hungary</b>	Díjmentesen hívható zöld szám +36 80 20 11 99
<b>Ireland</b>	Emergency telephone number +353 01 809 2166
<b>Latvia</b>	Valsts Toksikoloģijas centra Saindēšanās un zāļu informācijas centrs +371 6704 2473
<b>Lithuania</b>	Neatidėliotina informacija apsinuodijus +370 5 236 20 52
<b>Netherlands</b>	Telefoonnummer voor +31 30 274 88 88
<b>Norway</b>	Nødnummer +47 22 59 13 00
<b>Poland</b>	112
<b>Portugal</b>	Número de telefone de emergência +351 808 250 143
<b>Romania</b>	Număr de telefon care poate fi apelat în caz de urgență +021 318 36 06 (08:00-15:00)
<b>Slovakia</b>	Národné toxikologické informačné centrum +421 2 5477 4166
<b>Spain</b>	Número de teléfono de emergencia +34 91 562 0420
<b>Sweden</b>	Telefonnummer för nödsituationer +46 08 33 12 31 (09:00-17:00)
<b>Switzerland</b>	145; 041 44 251 51 51 (www.toxi.ch)
<b>Turkey</b>	(+)1 760 476 3959 ( Code 333938 )

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

<b>Aspiration toxicity</b>	Category 1 - (H304)
<b>Skin sensitization</b>	Category 1A - (H317)

### 2.2. Label Elements

Contains Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C),  
1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole

**Signal Word**

DANGER

**Hazard Statements**

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

EUH066 - Repeated exposure may cause skin dryness or cracking

**Precautionary Statements - EU (§28, 1272/2008)**

P280 - Wear protective gloves and protective clothing

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/ .?

P331 - Do NOT induce vomiting

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

**2.3. Other hazards**

No information available

- 2E-06 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 2E-06 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0.286002 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 0.286002 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0.286002 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

**3.1. Substances / 3.2. Mixtures**

This product is a mixture. Health hazard information is based on its ingredients

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	-	-	50% - 100%	Asp. Tox. 1 (H304) (EUH066)	-
2-Hexyldecan-1-ol	219-370-1	2425-77-6	2.5% - 10%	**	01-2119487981-22-xxx x
Tris(2-ethylhexyl) phosphate	201-116-6	78-42-2	1% - 2.5%	Skin Irrit. 2 (H315)	no data available
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	-	1% - 2.5%	**	-
1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole	401-280-0	91273-04-0	0% - 1%	Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	01-2119930450-49-xxx x
2,6-Di-tert-butyl-p-cresol	204-881-4	128-37-0	0% - 1%	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119565113-46-xxx x 01-2119480433-40-xxx x 01-2119555270-46-xxx x

**Additional information**

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346 See Section 15 for additional information on base oils.

\*\* Substances for which there are Community workplace exposure limits

Full text of H- and EUH-phrases: see section 16

**SECTION 4: FIRST AID MEASURES****4.1. Description of first-aid measures**

<b>General advice</b>	Immediate medical attention is required. Do not get in eyes, on skin, or on clothing. May produce an allergic reaction.
<b>Inhalation</b>	Move to fresh air. Potential for aspiration if swallowed. Get medical attention immediately if symptoms occur.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Clean mouth with water and afterwards drink plenty of water. Aspiration hazard if swallowed - can enter lungs and cause damage. If symptoms persist, call a physician.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

<b>Main Symptoms</b>	May be fatal if swallowed and enters airways, Rash, Redness, Itching, May cause allergic skin reaction
----------------------	--

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

<b>Notes to physician</b>	Treat symptomatically. May cause sensitization of susceptible persons.
---------------------------	--

**SECTION 5: FIRE FIGHTING MEASURES****5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment: Use CO<sub>2</sub>, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

**Extinguishing media which shall not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire

**5.2. Special hazards arising from the substance or mixture****Special Hazard**

In the event of fire and/or explosion do not breathe fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Cool containers / tanks with water spray. Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Decomposition Products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

**5.3. Advice for firefighters**

**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Advice for non-emergency personnel**

Material can create slippery conditions.

**Advice for emergency responders** For personal protection see section 8.

**6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

**6.3. Methods and materials for containment and cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dike to collect large liquid spills. After cleaning, flush away traces with water.

**6.4. Reference to other sections**

See Section 8/12/13 for additional information

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition.

**7.2. Conditions for safe storage, including any incompatibilities****Technical measures/Storage conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

**Recommended Shelf Life**

No information available.

**Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases

**7.3. Specific end uses****Specific use(s)**

Neat Metalworking Oil

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters**

Chemical Name	European Union	United Kingdom	France	Spain
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)				VLA-EC: 10 mg/m <sup>3</sup> VLA-ED: 5 mg/m <sup>3</sup>
Highly refined base oil (Viscosity >20.5 cSt @40°C)				VLA-EC: 10 mg/m <sup>3</sup> VLA-ED: 5 mg/m <sup>3</sup>
2,6-Di-tert-butyl-p-cresol		STEL: 30 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	VME: 10 mg/m <sup>3</sup>	

Chemical Name	Germany	Italy	Portugal	The Netherlands
2-Hexyldecan-1-ol	TWA: 20 ppm TWA: 200 mg/m <sup>3</sup>			
2,6-Di-tert-butyl-p-cresol	MAK: 20 mg/m <sup>3</sup> Ceiling / Peak: 40 mg/m <sup>3</sup> Skin		TWA: 2 mg/m <sup>3</sup>	

Chemical Name	Austria	Switzerland	Poland	Ireland
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)				STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (Mist)
Highly refined base oil (Viscosity >20.5 cSt @40°C)				STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (Mist)
2,6-Di-tert-butyl-p-cresol	MAK: 10 mg/m <sup>3</sup>	MAK: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>

Chemical Name	Finland	Denmark	Norway	Sweden
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	TWA: 5mg/m <sup>3</sup> (Öljysumu)	TWA: 1 mg/m <sup>3</sup> (Olietåge)	TWA: 1 mg/m <sup>3</sup> (Oljetåke)	LLV: 1 mg/m <sup>3</sup> STV: 3 mg/m <sup>3</sup> (Oljedimma)
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5mg/m <sup>3</sup> (Öljysumu)	TWA: 1 mg/m <sup>3</sup> (Olietåge)	TWA: 1 mg/m <sup>3</sup> (Oljetåke)	LLV: 1 mg/m <sup>3</sup> STV: 3 mg/m <sup>3</sup> (Oljedimma)
2,6-Di-tert-butyl-p-cresol	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		

Chemical Name	Czech Republic	Hungary	Bulgaria	Romania
2,6-Di-tert-butyl-p-cresol			STEL: 50.0 mg/m <sup>3</sup> TWA: 10.0 mg/m <sup>3</sup>	

Hydrocarbon solvent vapor mixtures which do not have substance specific occupational exposure limits may be evaluated by the Reciprocal Calculation Procedure (RCP) which assigns a recommended occupational exposure limit based on the mass composition and hydrocarbon group guidance values (GGVs). Applicable recommended occupational exposure limits are shown in the table below.

Chemical Name	RCP OEL	Manufacturer
Distillates (petroleum), hydrotreated middle 64742-46-7	RCP: TWA 1200 mg/m <sup>3</sup> 143ppm	

#### Workers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
2-Hexyldecan-1-ol		35 mg/kg	247 mg/m <sup>3</sup>			
2,6-Di-tert-butyl-p-cresol		8.3 mg/kg	5.8 mg/m <sup>3</sup>			

#### Workers Local effects

#### Consumers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
2-Hexyldecan-1-ol	21 mg/kg	21 mg/kg	73 mg/m <sup>3</sup>			
2,6-Di-tert-butyl-p-cresol		5 mg/kg	1.74 mg/m <sup>3</sup>			

**Consumers Local effects****Predicted No Effect Concentration (PNEC)**

Chemical Name	Fresh water	Sea water	Fresh water sediment	Sea sediment	Soil
1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole	0.96 µg/L	0.096 µg/L	0.684 mg/kg	0.0684 mg/kg	0.684 mg/kg
2,6-Di-tert-butyl-p-cresol	1.29 mg/kg	0.0004 mg/L	1.29 mg/kg		1.04 mg/kg

**8.2. Exposure controls****Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment****Eye Protection**

Safety glasses with side-shields.

**Hand Protection**

Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

**Skin and body protection**

Long sleeved clothing.

**Respiratory protection**

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

**Hygiene measures**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure Controls**

No special environmental precautions required.

**Thermal hazards**

None under normal use conditions

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. Information on basic physical and chemical properties****Physical state @20°C**

liquid

**Appearance**

clear , amber

**Odor**

mineral oil

**Odor Threshold**

Not Applicable

PropertyValuesNote**pH**

No information available

**Melting Point / Freezing Point**

No information available

**Boiling point/boiling range**

No information available

**Flash point**

170 °C / 338 °F

ASTM D 92

**Evaporation rate**

No information available

**Flammability (solid, gas)**

No information available

**Flammability Limits in Air****upper flammability limit**

No information available

**Lower flammability limit**

No information available

**Vapor pressure**

No information available

**Vapor density**

No information available

**Relative density**

0.8400

g/cm<sup>3</sup> @20°C

**Solubility(ies)**

Immiscible in water

**Partition coefficient: n-octanol/water**

Not Applicable

**Autoignition temperature**

No information available

<b>Decomposition temperature</b>	No information available	
<b>Viscosity, kinematic</b>	8.2 cSt @ 40 °C	ASTM D 445
<b>Explosive properties</b>	Not Applicable	
<b>Oxidizing Properties</b>	Not Applicable	

**9.2 Other information**

<b>Viscosity, kinematic (100°C)</b>	No information available	
<b>Pour point</b>	-18 °C / 0 °F	ASTM D 97
<b>VOC Content (ASTM E-1868-10)</b>	No information available	
<b>VOC Content</b>	No information available	

**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

None under normal use conditions

**10.2. Chemical stability**

Stable under normal conditions

**10.3. Possibility of hazardous reactions**

None under normal use conditions

**10.4. Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition

**10.5. Incompatible Materials**

Strong oxidizing agents, Strong acids, Strong bases

**10.6. Hazardous decomposition products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects****Product Information - Principle Routes of Exposure**

<b>Inhalation</b>	Risk of serious damage to the lungs (by aspiration)
<b>Eye contact</b>	None known
<b>Skin contact</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Ingestion</b>	Risk of product entering the lungs on vomiting after ingestion

**Acute toxicity - Product Information**

May be fatal if swallowed and enters airways.

**Acute toxicity - Component Information**

Chemical Name	LD50 Oral (Rat)	LD50 Dermal (Rat/Rabbit)	LC50 Inhalation
---------------	-----------------	--------------------------	-----------------



Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
2-Hexyldecan-1-ol	42000 mg/kg ( Rat )		
Tris(2-ethylhexyl) phosphate	37000 mg/kg	20000 mg/kg ( Rabbit )	
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole	>2000 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	
2,6-Di-tert-butyl-p-cresol	5000 mg/kg ( Rat )	5000 mg/kg ( Rabbit )	

<b>Skin corrosion/irritation</b>	None known.
<b>Serious eye damage/eye irritation</b>	None known.
<b>Sensitization</b>	
<b>Respiratory Sensitization</b>	None known.
<b>Skin sensitization</b>	Skin Sens. Cat. 1.
<b>Germ Cell Mutagenicity</b>	None known.
<b>Carcinogenicity</b>	None known.
<b>Reproductive toxicity</b>	None known.
<b>Specific target organ systemic toxicity (single exposure)</b>	None known
<b>Specific target organ systemic toxicity (repeated exposure)</b>	None known
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

No special environmental measures are necessary

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2-Hexyldecan-1-ol		100: 96 h <i>Leuciscus Idus</i> mg/L LC50 static		
Tris(2-ethylhexyl) phosphate				>42: 48 h <i>Daphnia magna</i> mg/L EC50
1-(N,N-bis(2-ethylhexyl)aminomethyl)-1,2,4-triazole	>0.96: 72 h <i>Scenedesmus subspicatus</i> mg/L EC50	1.1: 96 h <i>Brachydanio rerio</i> mg/L LC50		9.3: 24 h <i>Daphnia magna</i> mg/L EC50
2,6-Di-tert-butyl-p-cresol	6: 72 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 0.42: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	5: 48 h <i>Oryzias latipes</i> mg/L LC50		

### 12.2. Persistence and degradability

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

### 12.3. Bioaccumulative potential

Chemical Name	log Pow
---------------	---------

2-Hexyldecan-1-ol	7.9
2,6-Di-tert-butyl-p-cresol	4.17

**12.4. Mobility in soil**

The product is insoluble and floats on water

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

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**12.6. Other adverse effects**

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods****Waste from Residues / Unused Products**

Dispose of as hazardous waste in compliance with local and national regulations

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Observe all label precautions until container is cleaned, reconditioned or destroyed.

**Other Data**

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: TRANSPORT INFORMATION

**14.1. UN-Number**

Not regulated

**14.2. UN proper shipping name**

Not regulated

**14.3. Transport hazard class**

Not regulated

**14.4. Packing group**

Not regulated

**14.5. Environmental Hazards**

None

**14.6. Special precautions for users**

None

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

<b>IMDG/IMO</b>	Not regulated
<b>ADR/RID</b>	Not regulated
<b>ICAO/IATA</b>	Not regulated

## SECTION 15: REGULATORY INFORMATION

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

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)  
Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

Statutory Instruments: Control of Substances Hazardous to Health Regulations 2002. Chemicals (Hazard Information and Packaging) Regulations 2009.

Acts of Parliament: The Health and Safety at Work etc. Act 1974. Environment Protection Act 1990.

Regulation on classification, labeling, of hazardous chemicals (2002 changing 2005). Appendix VI to Regulation on classification, labeling etc. of hazardous chemicals (2002 changing 2010), list of hazardous substances (as amended). Guidelines for submission and declaration of hazardous waste (2009). Transport of dangerous goods: ADR, RID, IMDG and IATA. Administrative norms for pollution of the atmosphere, 2009.

Workplace exposure limits (EH40)

#### WGK Classification

Low hazard to water/Class 1

**The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:**

Chemical Name	CAS-No	EC-No	REACH Registration Number
Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated	101316-72-7	309-877-7	01-2119489969-06-xxxx
Lubricating oils (petroleum), used, noncatalytically refined	101316-73-8	309-878-2	02-2119822310-56-xxxx
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8	
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6	01-2119488707-21-xxxx
Extracts (petroleum), residual oil solvent	64742-10-5	265-110-5	01-2119488175-30-xxxx
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-2119467170-45-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25-xxxx
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8	01-2119489287-22-xxxx
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3	
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0	01-2119480472-38-xxxx
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7	265-174-4	01-2119487080-42-xxxx
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9	01-2119474878-16-xxxx
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1	276-738-4	01-2119474889-13-xxxx
Lubricating oils	74869-22-0	278-012-2	
Paraffin oils	8012-95-1	232-384-2	
White mineral oil (petroleum)	8042-47-5	232-455-8	01-2119487078-27-xxxx
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9	482-220-0	01-0000020163-82-xxxx

**The highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:**

Chemical Name	CAS-No	EC-No	REACH Registration Number
Distillates (petroleum), straight-run middle	64741-44-2	265-044-7	

Distillates (petroleum), heavy hydrocracked	64741-76-0	265-077-7	01-2119486951-26-xxxx
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	265-091-3	01-2119487067-30-xxxx
Distillates (petroleum), hydrotreated middle	64742-46-7	265-148-2	01-2119459347-30-xxxx
Distillates (petroleum), hydrotreated middle	64742-46-7	934-956-3	01-2119827000-58-xxxx
Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	01-2119456620-43-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	01-2119480375-34-xxxx
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25-xxxx
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7	01-2119487077-29-xxxx
Distillates, petroleum, solvent-dewaxed light paraffinic	64742-56-9	265-159-2	01-2119480132-48-xxxx
Distillates (petroleum), solvent-dewaxed heavy, paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	265-176-5	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9	01-2119474878-16-xxxx
Lubricating oils (petroleum), C20-C50, hydrotreated neutral oil-based	72623-87-1	276-738-4	01-2119474889-13-xxxx
White mineral oil (petroleum)	8042-47-5	232-455-8	01-2119487078-27-xxxx
C18-C50 branched, cyclic and linear hydrocarbons – Distillates	848301-69-9	482-220-0	01-0000020163-82-xxxx
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE	920-114-2	01-2119459347-30-xxxx

**15.2. Chemical Safety Assessment**

No information available

**SECTION 16: OTHER INFORMATION****Key or legend to abbreviations and acronyms used in the safety data sheet**

Repr.-Reproduction toxicity  
 Asp. Tox. - Aspiration Toxicity  
 Acute Tox. - Acute Toxicity  
 Aquatic Acute - Acute Aquatic Toxicity  
 Aquatic Chronic - Chronic Aquatic Toxicity  
 Eye Dam. - Eye Damage  
 Eye Irrit. - Eye Irritation  
 Skin Corr. - Skin Corrosion  
 Skin Irrit. - Skin Irritation  
 Skin Sens. - Skin Sensitizer  
 Resp. Sens. - Respiratory Sensitizer  
 STOT SE - Specific target organ systemic toxicity (Single exposure)  
 STOT RE - Specific target organ systemic toxicity (repeated exposure)  
 VOC - Volatile organic compounds

Full text of H-Statements referred to under sections 2 and 3

<ul style="list-style-type: none"> <li>• H224 - Extremely flammable liquid and vapor</li> <li>• H225 - Highly flammable liquid and vapor</li> <li>• H226 - Flammable liquid and vapor</li> <li>• H270 - May cause or intensify fire; oxidizer</li> <li>• H271 - May cause fire or explosion; strong oxidizer</li> <li>• H272 - May intensify fire; oxidizer</li> <li>• H290 - May be corrosive to metals</li> <li>• H300 - Fatal if swallowed</li> <li>• H301 - Toxic if swallowed</li> <li>• H302 - Harmful if swallowed</li> <li>• H304 - May be fatal if swallowed and enters airways</li> <li>• H310 - Fatal in contact with skin</li> <li>• H311 - Toxic in contact with skin</li> <li>• H312 - Harmful in contact with skin</li> <li>• H314 - Causes severe skin burns and eye damage</li> <li>• H315 - Causes skin irritation</li> <li>• H317 - May cause an allergic skin reaction</li> <li>• H318 - Causes serious eye damage</li> <li>• H319 - Causes serious eye irritation</li> <li>• H330 - Fatal if inhaled</li> <li>• H331 - Toxic if inhaled</li> <li>• H332 - Harmful if inhaled</li> <li>• H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled</li> <li>• H335 - May cause respiratory irritation</li> <li>• H336 - May cause drowsiness or dizziness</li> <li>• H340 - May cause genetic defects</li> </ul>	<ul style="list-style-type: none"> <li>• H341 - Suspected of causing genetic defects</li> <li>• H350 - May cause cancer</li> <li>• H351 - Suspected of causing cancer</li> <li>• H360 - May damage fertility or the unborn child</li> <li>• H361 - Suspected of damaging fertility or the unborn child</li> <li>• H362 - May cause harm to breast-fed children</li> <li>• H370 - Causes damage to organs</li> <li>• H371 - May cause damage to organs</li> <li>• H372 - Causes damage to organs through prolonged or repeated exposure</li> <li>• H373 - May cause damage to organs through prolonged or repeated exposure</li> <li>• H400 - Very toxic to aquatic life</li> <li>• H410 - Very toxic to aquatic life with long lasting effects</li> <li>• H411 - Toxic to aquatic life with long lasting effects</li> <li>• H412 - Harmful to aquatic life with long lasting effects</li> <li>• H413 - May cause long lasting harmful effects to aquatic life</li> <li>• H360Df - May damage the unborn child. Suspected of damaging fertility</li> <li>• H360D - May damage the unborn child</li> <li>• H360FD - May damage fertility. May damage the unborn child</li> <li>• H360F - May damage fertility</li> <li>• H361d - Suspected of damaging the unborn child</li> <li>• H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child</li> <li>• H361f - Suspected of damaging fertility</li> <li>• EUH066 - Repeated exposure may cause skin dryness or cracking</li> <li>• EUH210 - Safety data sheet available on request</li> <li>• EUH208 - May produce an allergic reaction</li> </ul>
---	--

**Exposure scenario**

No information available

**Revision Date:**

08-19-2015

**Revision Note****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.