

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Revision date 23-May-2024

Revision Number 2

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

1.1. Product identifier

Product Code(s) 124220
Safety data sheet number 124220
Product Name PLI MECAFLUID N 16

Pure substance/mixture Mixture

Contains LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED; HYDROCARBONS, C15-C20, N-ALKANES, ISOALKANES, CYCLICS, <0.03% AROMATICS

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

Recommended use Lubricant

1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Serious eye damage/eye irritation	Category 2 - (H319)
Aspiration hazard	Category 1 - (H304)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Contains LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED; HYDROCARBONS, C15-C20, N-ALKANES, ISOALKANES, CYCLICS, <0.03% AROMATICS



Signal word
Danger

Hazard statements

H304 - May be fatal if swallowed and enters airways

H319 - Causes serious eye irritation

H412 - Harmful to aquatic life with long lasting effects

EUH208 - Contains BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS. May produce an allergic reaction.

Precautionary statements

P273 - Avoid release to the environment

P280 - Wear eye protection/ face protection

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P337 + P313 - If eye irritation persists: Get medical advice/attention

P501 - Dispose of contents/ container to an approved waste disposal plant

Unknown aquatic toxicity**Additional information**

This product requires child resistant fastenings if supplied to the general public. This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Causes mild skin irritation.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable

3.2 Mixtures

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED	70 - 80%	309-877-7	-	Asp. Tox. 1 (H304)	-	-	-

101316-72-7							
HYDROCARBONS, C15-C20, N-ALKANES, ISOALKANES, CYCLICS, <0.03% AROMATICS	0 - 10%	934-956-3	-	Asp. Tox. 1 (H304)	-	-	-
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS	0 - 10%	270-608-0	-	Aquatic Chronic 2 (H411) Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	-	-	-
68457-79-4							
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE >5%]	0 - 10%	273-066-3	-	Aquatic Chronic 1 (H410) STOT RE 2 (H373) Repr. 2 (H361fd)	-	-	-
68937-41-7							
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS	0 - 10%	274-263-7	-	Skin Sens. 1B (H317)	-	-	-
70024-69-0							

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

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Get immediate medical attention.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. Rinse mouth. Get immediate medical attention.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and
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	tearing of the eyes. Prolonged contact may cause redness and irritation.
Inhalation	Coughing and/ or wheezing. Difficulty in breathing. Dizziness.
Eyes	May cause redness and tearing of the eyes.
Dermal	Prolonged contact may cause redness and irritation. May cause an allergic skin reaction.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Dry chemical, CO2, alcohol-resistant foam or water spray.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Carbon oxides. Phosphorus oxides. Oxides of sulphur. Nitrogen oxides (NOx).
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
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SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED 101316-72-7		0.97 mg/kg bw/day [4] [6]	2.73 mg/m ³ [4] [6] 5.58 mg/m ³ [5] [6]
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS 68457-79-4		11.87 mg/kg/day [4] [6]	8.13 mg/m ³ [4] [6]
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE >5%] 68937-41-7		0.417 mg/kg/day [4] [6]	0.145 mg/m ³ [4] [6]
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS 70024-69-0		3.33 mg/kg/day [4] [6]	11.75 mg/m ³ [4] [6]

[4] Systemic health effects.

[5] Local health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED 101316-72-7	0.74 mg/kg bw/day [4] [6]		1.19 mg/m ³ [5] [6]
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS 68457-79-4	0.24 mg/kg/day [4] [6]	5.93 mg/kg/day [4] [6]	2.06 mg/m ³ [4] [6]
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE >5%] 68937-41-7	0.04 mg/kg/day [4] [6]	0.208 mg/kg/day [4] [6]	0.07 mg/m ³ [4] [6]
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS 70024-69-0	0.833 mg/kg/day [4] [6]	1.667 mg/kg/day [4] [6]	2.9 mg/m ³ [4] [6]

[4] Systemic health effects.
[5] Local health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS 68457-79-4	4 µg/l	45 µg/L	4.6 µg/l		
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE >5%] 68937-41-7	0.00031 mg/l		0.000031 mg/l		
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS 70024-69-0	1 mg/l	10 mg/L	1 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
LUBRICATING OILS (PETROLEUM), C24-50,					9.33 mg/kg food

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
SOLVENT-EXTD., DEWAXED, HYDROGENATED 101316-72-7					
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS 68457-79-4	0.0244 mg/kg sediment dw	0.00244 mg/kg sediment dw	100 mg/L	0.00249 mg/kg soil dw	100 mg/l
PHENOL, ISOPROPYLATED, PHOSPHATE (3:1) [TRIPHENYL PHOSPHATE >5%] 68937-41-7	0.185 mg/kg	>0.019 mg/kg		1 mg/kg	100 mg/l
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS 70024-69-0	226000000 mg/kg	226000000 mg/kg	1000 mg/L	271000000 mg/kg	1000 mg/l

8.2. Exposure controls

Engineering controls

No information available.

Personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection

Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Nitrile rubber. Neoprene gloves. Gloves must conform to standard EN 374.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous liquid
Colour	No information available
Odour	No information available.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No information available.
Initial boiling point and boiling range	250.00 °C	ASTM D2887.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	145.00 °C	(ASTM D93).
Autoignition temperature		No information available.
Decomposition temperature		No information available.
pH		No information available.
pH (as aqueous solution)		No information available.
Kinematic viscosity	14.50 cSt	40.0 °C.
Dynamic viscosity		No information available.
Water solubility	Immiscible in water	
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure		No information available.
Relative density	0.91	ASTM D4052.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended storage conditions.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Excessive heat.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx). Phosphorus oxides. Oxides of sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation	Aspiration into lungs can produce severe lung damage. May cause irritation of respiratory tract.
Eye contact	Causes serious eye irritation.
Skin contact	May cause an allergic skin reaction.
Ingestion	May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Difficulty in breathing. Coughing and/ or wheezing. May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 2.18 mg/L (Rat) 4 h
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS	= 3600 mg/kg (Rat)	> 20000 mg/kg (Rabbit)	-
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS	> 2000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 1.9 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	United Kingdom
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED	Carc. 1B

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard May be fatal if swallowed and enters airways.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS	EC50: 1.0 - 5.0mg/L (96h, Pseudokirchneriella subcapitata)	LC50: >100mg/L (96h, Pimephales promelas) LC50: 25 - 50mg/L (96h, Pimephales promelas)	-	EC50: 4.0 - 6.0mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS	0.69

12.4. Mobility in soil

Mobility in soil Insoluble.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED	The substance is not PBT / vPvB
PHOSPHORODITHIOIC ACID, MIXED O,O-BIS(ISO-BU AND PENTYL) ESTERS, ZINC SALTS	The substance is not PBT / vPvB
BENZENESULFONIC ACID, MONO-C16-24-ALKYL DERIVS., CALCIUM SALTS	The substance is not PBT / vPvB

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated
 14.2
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
LUBRICATING OILS (PETROLEUM), C24-50, SOLVENT-EXTD., DEWAXED, HYDROGENATED - 101316-72-7	Use restricted. See item 28. Restricted Carcinogen 1B	-

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)

Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)

Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H304 - May be fatal if swallowed and enters airways
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H411 - Toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note ***Indicates updated data since last publication

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)

European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

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.

End of Safety Data Sheet