

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) 124186
Safety data sheet number 124186
Product Name PETRONAS CIRCULA PM 150

Pure substance/mixture Mixture

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

Chronic aquatic toxicity	Category 3 - (H412)
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2.2. Label elements

Signal word
Warning

Hazard statements

H412 - Harmful to aquatic life with long lasting effects

EUH208 - Contains MALEIC ANHYDRIDE; TRIPHENYL PHOSPHITE. May produce an allergic reaction.

Precautionary statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear eye protection/ face protection

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

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

Unknown aquatic toxicity

2.3. Other hazards

Harmful to aquatic life.

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)
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE) 4259-15-8	0 - 10%	224-235-5	-	Aquatic Chronic 2 (H411) Eye Dam. 1 (H318)	-	-	-
2,6 DI TERT BUTYLPHENOL 128-39-2	0 - 10%	204-884-0	-	Aquatic Chronic 1 (H410) Aquatic Acute 1 (H400) Skin Irrit. 2 (H315)	-	-	-
TRIPHENYL PHOSPHITE 101-02-0	0 - 10%	202-908-4	-	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Eye Irrit. 2 :: C>=5% Skin Irrit. 2 :: C>=5%	-	-
2-ETHYLHEXANOL 104-76-7	0 - 10%	203-234-3	-	Acute Tox. 4 (H332) Eye Irrit. 2 (H319) Skin Irrit. 2 (H315) STOT SE 3 (H335)	-	-	-
MALEIC ANHYDRIDE 108-31-6	0 - 10%	203-571-6 (607-096-00-9)	-	(EUH071) Acute Tox. 4 (H302) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Resp. Sens. 1 (H334) Skin Sens. 1A (H317) STOT RE 1 (H372)	Skin Sens. 1A :: C>=0.001%	-	-

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

Inhalation	Remove to fresh air. Get medical attention if symptoms occur.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor.
Ingestion	Rinse mouth.

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

Dermal	Hives. Itching. Rashes.
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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, CO ₂ , 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 (NO _x).
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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.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry 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

Chemical name	United Kingdom
2-ETHYLHEXANOL 104-76-7	TWA: 1 ppm TWA: 5.4 mg/m ³ STEL: 3 ppm STEL: 16.2 mg/m ³
MALEIC ANHYDRIDE 108-31-6	TWA: 1 mg/m ³ STEL: 3 mg/m ³ Sen+

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
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE) 4259-15-8		9.6 mg/kg bw/day [4] [6]	6.6 mg/m ³ [4] [6]
2,6 DI TERT BUTYLPHENOL 128-39-2		11.25 mg/kg bw/day [4] [6]	70.61 mg/m ³ [4] [6]
2-ETHYLHEXANOL 104-76-7		23 mg/kg/day [4] [6]	53.2 mg/m ³ [5] [7]

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

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE) 4259-15-8	0.19 mg/kg bw/day [4] [6]		1.67 mg/m ³ [4] [6]
2,6 DI TERT BUTYLPHENOL 128-39-2	6.75 mg/kg bw/day [4] [6]		20.9 mg/m ³ [4] [6]
2-ETHYLHEXANOL 104-76-7	1.1 mg/kg/day [4] [6]	11.4 mg/kg/day [4] [6]	26.6 mg/m ³ [5] [7]

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

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE) 4259-15-8	4 µg/L	44 µg/L	4.6 µg/L		
2-ETHYLHEXANOL 104-76-7	0.017 mg/l	0.17 mg/L	0.0017 mg/l		

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE) 4259-15-8	0.322 mg/kg sediment dw	0.0322 mg/kg sediment dw	3.8 mg/L	0.0619 mg/kg soil dw	8.33 mg/kg food
2-ETHYLHEXANOL 104-76-7	0.284 mg/kg	0.0284 mg/kg	10 mg/L	0.047	10 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. Gloves must conform to standard EN 374.

Skin and body protection No special protective equipment required.

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.

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

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

Property	Values	Remarks • Method
Melting point / freezing point		No information available.
Initial boiling point and boiling range	> 300.00 °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	240.00 °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	150.00 cSt	40.0 °C.
Dynamic viscosity		No information available.
Water solubility	Immiscible in water	No information available.
Solubility(ies)		No information available.
Partition coefficient		No information available.
Vapour pressure		No information available.
Relative density	0.88	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 Oxidising agents. Strong acids. Strong bases.

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 May cause irritation.

Eye contact May cause temporary eye irritation.

Skin contact May cause slight irritation.

Ingestion Gastrointestinal discomfort.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

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
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE)	= 3100 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
2,6 DI TERT BUTYLPHENOL	> 5000 mg/kg (Rat)	> 10 g/kg (Rabbit)	-
TRIPHENYL PHOSPHITE	= 1590 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 6.7 mg/L (Rat) 1 h
2-ETHYLHEXANOL	= 3730 mg/kg (Rat)	= 1980 mg/kg (Rabbit)	> 227 ppm (Rat) 6 h
MALEIC ANHYDRIDE	= 1030 mg/kg (Rat)	= 2620 mg/kg (Rabbit)	-

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

Skin corrosion/irritation No information available.

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Human evidence	Dermal			Corrosive
	Animal				

Serious eye damage/eye irritation No information available.

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			Corrosive

Respiratory or skin sensitisation May cause an allergic skin reaction.

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Exposure route	Results
		Dermal	Sensitising
		Inhalation	Sensitising

Germ cell mutagenicity No information available.

Component Information

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Results
	in vivo	Not mutagenic
	in vitro	In vitro genetic toxicity studies were negative in some cases and positive in other cases.

Carcinogenicity No information available.

Reproductive toxicity No information available.

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Results
	Rat	NOAEL 55 mg/kg/day Negative
	Rat	NOAEL 55 mg/kg/day Negative
	Rat	NOAEL 140 mg/kg/day Negative

STOT - single exposure

No information available.

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rat	Inhalation	LOAEL 0.0011 mg/L	6 months	May cause damage to organs through prolonged or repeated exposure
	Rat	Inhalation	NOAEL 0.0098 mg/L	6 months	Not classified
	Rat	Oral	NOAEL 55 mg/kg	80 days	Some positive data exist, but the data are not sufficient for classification
	Rat	Oral	LOAEL 250 mg/kg	183 days	Some positive data exist, but the data are not sufficient for classification
	Rat	Oral	NOAEL 600 mg/kg	183 days	Not classified
	Rat	Oral	NOAEL 150 mg/kg	80 days	Not classified
	Dog	Oral	NOAEL 60 mg/kg	90 days	Not classified
	Rat	Oral	NOAEL 150 mg/kg	80 days	Not classified

STOT - repeated exposure

No information available.

Component Information

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
	human data	Inhalation			May cause respiratory irritation

Aspiration hazard

No information available.

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

MALEIC ANHYDRIDE (108-31-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Bacteria toxicity	EC10	44.6 mg/L	18 hours	
	Oncorhynchus mykiss (rainbow trout)	LC50	75 mg/L	96 hours	

	Green Algae	ErC50	74.4 mg/L	72 hours	
	Water flea	EC50	93.8 mg/L	48 hours	
	Water flea	NOEC	10 mg/L	21 days	
	Green Algae	ErC10	11.8 mg/L	72 hours	

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE)	EC50: 1.0 - 5.0mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 10.0 - 35.0mg/L (96h, Pimephales promelas) LC50: 1.0 - 5.0mg/L (96h, Pimephales promelas)	-	EC50: 1 - 1.5mg/L (48h, Daphnia magna)
2,6 DI TERT BUTYLPHENOL	-	-	-	EC50: =0.45mg/L (48h, Daphnia magna)
2-ETHYLHEXANOL	EC50: =11.5mg/L (72h, Desmodesmus subspicatus)	LC50: 32 - 37mg/L (96h, Oncorhynchus mykiss) LC50: >7.5mg/L (96h, Oncorhynchus mykiss) LC50: 27 - 29.5mg/L (96h, Pimephales promelas) LC50: =29.7mg/L (96h, Pimephales promelas) LC50: 10.0 - 33.0mg/L (96h, Lepomis macrochirus)	-	EC50: =39mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

MALEIC ANHYDRIDE (108-31-6)

Method	Exposure time	Value	Results
OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B)	25 days	>90% Biodegradation	Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE)	3.59
2,6 DI TERT BUTYLPHENOL	4.5
TRIPHENYL PHOSPHITE	4.98
2-ETHYLHEXANOL	2.9
MALEIC ANHYDRIDE	-2.78

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
ZINC BIS[O,O-BIS(2-ETHYLHEXYL)] BIS(DITHIOPHOSPHATE)	The substance is not PBT / vPvB
2,6 DI TERT BUTYLPHENOL	The substance is not PBT / vPvB

TRIPHENYL PHOSPHITE	The substance is not PBT / vPvB
2-ETHYLHEXANOL	The substance is not PBT / vPvB
MALEIC ANHYDRIDE	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).

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/NDSL	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/NDSL - 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**

EUH071 - Corrosive to the respiratory tract
 H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H315 - Causes skin irritation
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H319 - Causes serious eye irritation
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H372 - Causes damage to organs through prolonged or repeated exposure
 H400 - Very toxic to aquatic life
 H410 - Very toxic to aquatic life with long lasting effects
 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

Prepared By Jitendra Panchal

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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