



A Subsidiary of PETRONAS Chemicals Group

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

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Version 2

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

1.1. Product identifier

Product name BRB Siloen® 5022 WR

Pure substance/mixture Mixture

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

Recommended Use Building and construction work

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

BRB International BV
Branskamp 12
6014 CB Ittervoort
The Netherlands
☎ 0031-475-560300

BRB Central Eastern Europe Sp. z o.o.
ul. Klimeckiego 1
30-705 Krakow
Poland
☎ 0048-12-4157922

For further information, please contact

Contact Point Regulatory Affairs Department

E-mail address MSDS@brbbv.com

1.4. Emergency telephone number

Emergency telephone 0031-475-560300 / 0048-12-4157922

Emergency telephone - §45 - (EC)1272/2008

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements

**Signal word**

Warning

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

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

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

P273 - Avoid release to the environment

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P308 + P313 - IF exposed or concerned: Get medical advice/attention

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

2.3. Other hazards

No information available.

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

Not applicable

3.2 Mixtures

Chemical name	EC No	CAS No	REACH registration number	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Weight-%
Triethoxyoctylsilane	220-941-2	2943-75-1	01-2119972313-39	Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411)	50-100
Poly Amino Functional Siloxane, Hydroxy-Terminated	-	75718-16-0	No data available	Skin Irrit. 2 (H315)	5-10
Isotridecanol, branched, ethoxylated	-	69011-36-5	No data available	Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	1-5
Isotridecanol, branched, ethoxylated	-	69011-36-5	No data available	Eye Dam. 1 (H318) Acute Tox. 4 (H302)	1-5

Chemical name	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Remarks
Isotridecanol, branched, ethoxylated	Eye Dam. 1 :: C>=10% Eye Irrit. 2 :: 1%<=C<10%	-	-	-

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a doctor.***
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Drink plenty of water. Call a doctor.***
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	May cause redness and tearing of the eyes. Burning sensation.
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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	Carbon dioxide (CO ₂). Dry chemical. Alcohol resistant foam. Cool containers with flooding quantities of water until well after fire is out.
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

Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO ₂). Nitrogen oxides (NO _x).

5.3. Advice for firefighters

Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. In the event of fire and/or explosion do not breathe fumes.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Special danger of slipping by leaking/spilling product. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Should not be released into the environment. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained. 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 Dam up. Use personal protective equipment as required. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

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 12 for additional Ecological 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. Use personal protection equipment. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapours/spray.***

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Regular cleaning of equipment, work area and clothing is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labelled containers. Keep/store only in original container.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material 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) worker.

Derived No Effect Level (DNEL)
Triethoxyoctylsilane (2943-75-1)
Type Systemic health effects, Long term
Exposure route Dermal
Derived No Effect Level (DNEL) 1 mg/kg bw/d

Type Systemic health effects, Long term
Exposure route Inhalation
Derived No Effect Level (DNEL) 7.1 mg/m³

Derived No Effect Level (DNEL) - Consumer

Derived No Effect Level (DNEL)
Triethoxyoctylsilane (2943-75-1)
Type Systemic health effects, Long term
Exposure route Oral
Derived No Effect Level (DNEL) 0.5 mg/kg bw/d

Type Systemic health effects, Long term
Exposure route Dermal
Derived No Effect Level (DNEL) 0.5 mg/kg bw/d

Type Systemic health effects, Long term
Exposure route Inhalation
Derived No Effect Level (DNEL) 1.7 mg/m³

Predicted No Effect Concentration (PNEC)

Predicted No Effect Concentration (PNEC)
Triethoxyoctylsilane (2943-75-1)
Environmental compartment Freshwater
Predicted No Effect Concentration (PNEC) 0.002 mg/l

Environmental compartment Freshwater sediment
Predicted No Effect Concentration (PNEC) 4.2 mg/kg dry weight

Environmental compartment Marine water
Predicted No Effect Concentration (PNEC) 0 mg/l

Environmental compartment Marine sediment
Predicted No Effect Concentration (PNEC) 0.42 mg/kg dry weight

Environmental compartment Microorganisms in sewage treatment
Predicted No Effect Concentration (PNEC) 100 mg/l

8.2. Exposure controls**Engineering controls**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)***	Wear protective nitrile rubber gloves***	>=0.4 mm***	480 minutes***

Skin and body protection Wear suitable protective clothing. Long sleeved 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. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Colour	white
Odour	characteristic.
Odour threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point/freezing point	No data available	None known
Boiling point / boiling range	approx.*** 100*** °C***	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit	No data available	
Flash Point	No data available	Not Applicable
Autoignition Temperature	No data available	None known
Decomposition temperature		None known
pH	7	
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	@ 40°C
Dynamic viscosity	approx. 300 mPa s	@ 40°C
Water solubility	Soluble in water	@ 20°C
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	
Relative Density	approx. 0.932 g/cm ³	
Bulk Density	No data available	
Density	No data available	
Vapour Density	No data available	None known
Particle characteristics		
Particle Size	No information available	

Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

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 None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Incompatible with oxidising agents. Acids. Bases.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapours.
Carbon dioxide (CO₂). Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information Product does not present an acute toxicity hazard based on known or supplied information***

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Triethoxyoctylsilane	> 5110 mg/kg (Rat OECD Guideline 401)	approx. 6730 mg/kg (Rat OECD Guideline 402)	> 22 ppm (Rat OECD Guideline 403)
Isotridecanol, branched, ethoxylated	> 5000 mg/kg (Rat)	> 2000 mg/kg (rabbit)	> 1.6 mg/L (Rat) 4 h
Isotridecanol, branched, ethoxylated	> 300 - 2000 mg/kg (Rat)	> 2000 mg/kg (rabbit)	> 1.6 mg/L (Rat) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Triethoxyoctylsilane (2943-75-1)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	ErC50	> 0.13 mg/L	72 hours	
OECD Test No. 203: Fish, Acute Toxicity Test	Oncorhynchus mykiss (rainbow trout)	LC50	> 0.055 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 0.049 mg/L	48 hours	

Isotridecanol, branched, ethoxylated (69011-36-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Algae	EC50	> 1 - 10 mg/L	72 hours	
OECD Test No. 203: Fish, Acute Toxicity Test	Cyprinus carpio	LC50	> 1 - 10 mg/L	96 hours	
	Leuciscus idus	LC50	> 1 - 10 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 1 - 10 mg/L	48 hours	
	Daphnia magna	NOEC	approx. 1.36 mg/L	504 hours	

Isotridecanol, branched, ethoxylated (69011-36-5)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Algae	EC50	> 10 - 100 mg/L	72 hours	
OECD Test No. 203: Fish, Acute Toxicity Test	Cyprinus carpio	LC50	> 10 - 100 mg/L	96 hours	
	Leuciscus idus	LC50	> 10 - 100 mg/L	96 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	> 10 - 100 mg/L	48 hours	

12.2. Persistence and degradability**Persistence and degradability** No information available.**Product Information**

Biodegradation No information available
BOD No information available
ThCO₂ No information available
DOC No information available

Chemical name	Biodegradation
Triethoxyoctylsilane 2943-75-1	Biodegradation: 31.5% (672h OECD 301D)
Isotridecanol, branched, ethoxylated 69011-36-5	Biodegradation: > 60 % (672h OECD 301B)
Isotridecanol, branched, ethoxylated 69011-36-5	Biodegradation: > 60 % (672h OECD 301B)

12.3. Bioaccumulative potential

Bioaccumulation (factor) No information available

Component Information

Chemical name	Partition coefficient
Triethoxyoctylsilane	6.41

12.4. Mobility in soil

Mobility in soil No information available.

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
Triethoxyoctylsilane	The substance is not PBT / vPvB***
Isotridecanol, branched, ethoxylated	The substance is not PBT / vPvB
Isotridecanol, branched, ethoxylated	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. 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 Contaminated packages must be completely emptied and can be re-used following proper cleaning. Clean IBCs or drums at approved facility. Packaging which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the product itself.

OTHER INFORMATION Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IATA

14.1 UN number or ID number UN3082***
 14.2 UN proper shipping name Environmentally hazardous substances, liquid, n.o.s.***
 14.3 Transport hazard class(es) 9***
 14.4 Packing group III***
 Description UN3082, Environmentally hazardous substances, liquid, n.o.s.(Triethoxyoctylsilane), 9, III***
 14.5 Environmental Hazard Yes***
 14.6 Special precautions for user
 Special Provisions A97, A158, A197***

IMDG

14.1 UN number or ID number UN3082***
 14.2 UN proper shipping name Environmentally hazardous substances, liquid, n.o.s.***
 14.3 Transport hazard class(es) 9***
 14.4 Packing group III***

Description	UN3082, Environmentally hazardous substances, liquid, n.o.s.(Triethoxyoctylsilane), 9, III, Marine pollutant***
14.5 Environmental Hazard	Yes***
14.6 Special precautions for user	
Special Provisions	274, 335, 969***
EmS-No	F-A, S-F***
14.7 Maritime transport in bulk according to IMO instruments	No information available
RID	
14.1 UN number or ID number	UN3082***
14.2 UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s.***
14.3 Transport hazard class(es)	9***
14.4 Packing group	III***
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.(Triethoxyoctylsilane), 9, III***
14.5 Environmental Hazard	Yes***
14.6 Special precautions for user	
Special Provisions	274, 335, 375, 601***
Classification code	M6***
ADR	
14.1 UN number or ID number	UN3082***
14.2 UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s.***
14.3 Transport hazard class(es)	9***
14.4 Packing group	III***
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s.(Triethoxyoctylsilane), 9, III***
14.5 Environmental Hazard	Yes***
14.6 Special precautions for user	
Special Provisions	274, 335, 601, 375***
Classification code	M6***
ADR Hazard Id (Kemmler Number)	90***

SECTION 15: Regulatory information

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

European Union

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.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

E2 - Hazardous to the Aquatic Environment in Category Chronic 2

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Contact supplier for inventory compliance status
EINECS/ELINCS	Complies
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AICS	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status
NECI	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
AICS	- Australian Inventory of Chemical Substances
NZIoC	- New Zealand Inventory of Chemicals
NECI	- Taiwan National Existing Chemical Inventory

15.2. Chemical safety assessment

Chemical Safety Report	Chemical safety assessments for substances in this mixture were not carried out For this substance a chemical safety assessment has not been carried out
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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**

H302 - Harmful if swallowed
H315 - Causes skin irritation
H318 - Causes serious eye damage
H319 - Causes serious eye irritation
H411 - Toxic to aquatic life with long lasting effects
H412 - Harmful 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

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	On basis of test data
Chronic aquatic toxicity	On basis of test data
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)
 EPA (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)
 Japan GHS Classification
 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)
 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

Revision date 27-Jan-2022

Revision note See the red text with asterisks in this safety data sheet for the latest changes.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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