SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Hazardous Substances (Safety Data Sheets) Notice 2017 EPA Consolidation 30 September 2022

MARLEY MCS White
Revision Number 1.01

Revision date 26-Jan-2025
Supersedes date 04-Jul-2021

Section 1: Identification

Product identifier

Product Name MARLEY MCS White

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use Adhesives

Uses advised against Consumer use

Details of the supplier of the safety data sheet

Supplier
Bostik New Zealand Limited
19 Eastern Hutt Road Wingate,
Lower Hutt, New Zealand
Tel: 04-567 5119
Fax: 04-567 5412

Manufacturer
Bostik New Zealand Limited
19 Eastern Hutt Road Wingate,
Lower Hutt, New Zealand
Tel: 04-567 5119
Fax: 04-567 5412

E-mail address SDS.AP@Bostik.com

Emergency telephone number

Emergency Telephone 24 Hr: 0800 243 622
International +64 4 917 9888
Poison Centre : 0800 764 766

Section 2: Hazard identification

GHS Classification

Flammable liquids	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Hazardous to the aquatic environment - chronic	Category 3

Label elements

Signal word
Danger

Hazard statements
H225 - Highly flammable liquid and vapor
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H360 - May damage fertility or the unborn child
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Use only outdoors or in a well-ventilated area
Avoid release to the environment
Ground and bond container and receiving equipment
Use non-sparking tools
Take action to prevent static discharges
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Keep cool
Wear protective gloves
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
Skin
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]
Wash contaminated clothing before reuse
Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing
Fire
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification
Harmful to aquatic life. In use, may form flammable/explosive vapor-air mixture.

Section 3: Composition/information on ingredients

Chemical name	CAS No.	Weight-%
Methyl ethyl ketone	78-93-3	20- <40
Tetrahydrofuran	109-99-9	10 - <20
Silica, amorphous	7631-86-9	5 - <10
Titanium dioxide	13463-67-7	5 - <10
Carbonic acid, calcium salt (1:1)	471-34-1	1 - <5
Dibutyltin dilaurate	77-58-7	0.1- <1

Non-hazardous ingredients	Proprietary	Balance

Section 4: First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation Remove to fresh air. IF exposed or concerned: Get medical advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

Section 5: Fire-fighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

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.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products Carbon oxides. Carbon monoxide. Carbon dioxide (CO2). Hydrogen chloride. Silicon dioxide.

Special protective actions for fire-fighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

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

protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Protect from moisture.

Recommended storage temperature Keep at temperatures between 41 and 77 °F / 5 and 25 °C.

Incompatible materials None known based on information supplied.

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

Chemical name	New Zealand	ACGIH TLV	United Kingdom	Australia
Methyl ethyl ketone 78-93-3	TWA: 150 ppm TWA: 445 mg/m³ STEL: 300 ppm STEL: 890 mg/m³	TWA: 75 ppm STEL: 150 ppm Sk*	TWA: 200 ppm TWA: 600 mg/m³ STEL: 300 ppm STEL: 899 mg/m³ Sk*	TWA: 150 ppm TWA: 445 mg/m³ STEL: 300 ppm STEL: 890 mg/m³
Tetrahydrofuran 109-99-9	TWA: 50 ppm TWA: 150 mg/m³ STEL: 100 ppm STEL: 300 mg/m³ Sk*	TWA: 50 ppm STEL: 100 ppm Sk*	TWA: 50 ppm TWA: 150 mg/m³ STEL: 100 ppm STEL: 300 mg/m³ Sk*	TWA: 100 ppm TWA: 295 mg/m³
Silica, amorphous 7631-86-9	-	-	TWA: 6 mg/m³ TWA: 2.4 mg/m³ STEL: 18 mg/m³ STEL: 7.2 mg/m³	TWA: 2 mg/m³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³	TWA: 0.2 mg/m³ nanoscale respirable particulate matter TWA: 2.5 mg/m³ finescale respirable particulate matter	TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 30 mg/m³ STEL: 12 mg/m³	TWA: 10 mg/m³
Carbonic acid, calcium salt (1:1) 471-34-1	TWA: 10 mg/m³	-	-	TWA: 10 mg/m³
Dibutyltin dilaurate 77-58-7	TWA: 0.05 mg/m³ STEL: 0.02 mg/m³ STEL: 0.1 mg/m³ Sk*	TWA: 0.1 mg/m³ Sn STEL: 0.2 mg/m³ Sn Sk*	TWA: 0.1 mg/m³ STEL: 0.2 mg/m³ Sk*	TWA: 0.1 mg/m³ STEL: 0.2 mg/m³

Biological occupational exposure limits

Chemical name	New Zealand	ACGIH

Methyl ethyl ketone 78-93-3	2 mg/L - urine (MEK) - end of shift	2 mg/L - urine (MEK) - end of shift
Tetrahydrofuran 109-99-9	2 mg/g creatinine - urine (THF) - end of exposure or shift, within 1 hour of end of exposure	2 mg/L - urine (Tetrahydrofuran) - end of shift

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Hand protection Wear suitable gloves. Impervious gloves.

Skin and body protection Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

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.

Environmental exposure controls No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paste Viscous
Color	White
Odor	Solvent.
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	Not applicable Insoluble in water
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	66 °C	
Flash point	-6 °C	
Evaporation rate	No data available	None known
Flammability	No data available	Flammable liquid
Flammability Limit in Air		None known
Upper flammability or explosive limits	11.5	
Lower flammability or explosive limits	1.9	
Vapor pressure	<110 kPa	None known
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	Insoluble in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	700	None known
Dynamic viscosity	No data available	
Explosive properties	No information available.	
Oxidizing properties	No information available.	

Other information

Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Density	1.4 g/cm³
Bulk density	No information available
Particle characteristics	

Section 10: Stability and reactivity

Reactivity

Reactivity No information available.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Protect from moisture.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx). Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness.

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 May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms Itching. Rashes. Hives. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity .

Numerical measures of toxicity

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

ATEmix (oral) 9,001.30 mg/kg
ATEmix (dermal) >5000 mg/kg
ATEmix (inhalation-gas) >20000 ppm
ATEmix (inhalation-vapor) >20 mg/l
ATEmix (inhalation-dust/mist) >5 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl ethyl ketone	=2483 mg/kg (Rattus)	= 5000 mg/kg (Oryctolagus cuniculus)	=11700 ppm (Rattus) 4 h
Tetrahydrofuran	=1650 mg/kg (Rattus)	>2000 mg/kg (rattus)	=21000 ppm (Rattus) 3 h
Silica, amorphous	=7900 mg/kg (Rattus)	> 5000 mg/kg (Oryctolagus cuniculus)	>2.2 mg/L (Rattus) 1 h
Titanium dioxide	>10000 mg/kg (Rattus)	LD50 > 5000 mg/Kg	= 5.09 mg/L (Rattus) 4 h
Carbonic acid, calcium salt (1:1)	LD50 > 2000 mg/kg (Rattus) OECD 420	LD50 >2000 mg/kg (Rattus) OECD 402	LC50 (4h) >3mg/ml (Rattus)
Dibutyltin dilaurate	=2071 mg/kg (Rattus) OECD 401	> 2000 mg/kg (Rattus)	-

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

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Titanium dioxide (13463-67-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal			Non-irritant

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

Component Information
Methyl ethyl ketone (78-93-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	eye			irritant

Titanium dioxide (13463-67-7)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	Eye			Non-irritant

Respiratory or skin sensitization May cause an allergic skin reaction.

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

Carcinogenicity This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product. Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

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

Chemical name	New Zealand	IARC
Tetrahydrofuran - 109-99-9	Suspected carcinogen	Group 2B
Silica, amorphous - 7631-86-9	-	Group 3
Titanium dioxide - 13463-67-7	-	Group 2B

Legend

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Tetrahydrofuran (109-99-9)

Method	Species	Results
OECD 451	Rat	Carcinogenic

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

STOT - single exposure May cause drowsiness or dizziness.

Methyl ethyl ketone (78-93-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
Experiences made in practice					May cause drowsiness or dizziness Causes central nervous system depression

Narcotic effects Narcotic effects.

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

Methyl ethyl ketone (78-93-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 413: Subchronic Inhalation Toxicity: 90-day Study	Rat	Inhalation vapor	1254, 2518, 5041 ppm/6h/d	90 days	NOAEC 5014 ppm

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

Section 12: Ecological information

Ecotoxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Aquatic ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Crustacea
Methyl ethyl ketone	EC50=1972 mg/l (Pseudokirchneriella subcapitata)	LC50: 3130 - 3320mg/L (96h, Pimephales promelas)	EC50 48 h > 308 mg/L (Daphnia magna)
Tetrahydrofuran	-	LC50: 1970 - 2360mg/L (96h, Pimephales promelas) LC50: 2700 - 3600mg/L (96h, Pimephales promelas)	EC50: =5930mg/L (24h, Daphnia magna)
Silica, amorphous	EC50: =440mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =5000mg/L (96h, Brachydanio rerio)	EC50: =7600mg/L (48h, Ceriodaphnia dubia)
Titanium dioxide	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-
Carbonic acid, calcium salt (1:1)	IC50 72H Algae >1000 mg/l	CL50 96H >1000 mg/l	EC50 48H Daphnia >1000 mg/l
Dibutyltin dilaurate	EC50 1 (72h) mg/L (desmodesmus subspicatus)	LC50: =2mg/L (48h, Oryzias latipes)	0,463 (48h) mg/L (daphnia magma)

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability No information available.

Bioaccumulative potential
Bioaccumulation
Component Information

Chemical name	Partition coefficient
Methyl ethyl ketone	0.3
Tetrahydrofuran	0.45
Dibutyltin dilaurate	4.44

Mobility in soil
Mobility No information available.

Other adverse effects
No information available.

Disposal methods

Waste from residues/unused products Dispose of product in packaging in a way that is consistent with the EPA Consolidation 30 April 2021 of the Hazardous Substances (Disposal) Notice 2017 and the Act. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance; or export the substance from New Zealand as waste. Flammable substances - may not be disposed of into or onto a landfill or sewage facility.
They may only be burnt in certain situations.
Flammable gases, liquids and solids may only be discharged into the environment or landfill as waste if the substance will not at any time come into contact with any explosives, oxidising gases, liquids or solids or organic peroxides; and there will be no ignition source in the vicinity of the disposal site at any time and if the substance were to ignite, no person, or place where a person may legally be, would be exposed to an unsafe level of heat radiation. Substances which are hazardous to human health or corrosive to metals – may be discharged into the environment if a tolerable exposure limit has been set for the substance (or a component of that substance); and the discharge

does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the tolerable exposure limit. If there is no tolerable exposure limit for the substance, then it may only be discharged into the environment if the substance is very rapidly converted to substances that are not hazardous substances. Environmentally hazardous substances – if the substance, or if it contains a component that is hazardous to the aquatic environment or bioaccumulative and not rapidly degradable, then any component that is bioaccumulative and not rapidly degradable must be removed. The product may only be discharged into the environment if an environmental exposure limit has been set for the substance (or a component of the substance); and the discharge does not, after reasonable mixing, result in the concentration of the substance in an environmental medium exceeding the environmental exposure limit.

Contaminated packaging

For packages that have been in direct contact with hazardous substances, the person must ensure that the package is rendered incapable of containing any substance. It must be disposed of in a manner that is consistent with the requirements for disposal of the substance that it contained, taking into account the material the package is manufactured from. Packages may only be reused or recycled if:
- the substance has a physical hazard other than corrosive to metal, and has been treated to remove any residual contents of the hazardous substance;
- or for substances that have a health or environmental hazard, or corrosive to metal, the contents of the residue in the package are below the threshold for the substance to be classified as hazardous in the Hazardous Substances (Hazard Classification) Notice 2020.

Section 14: Transport information

IATA

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	3
Packing group	II
Special Provisions	A3
Description	UN1133, Adhesives, 3, II

IMDG

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	3
Packing group	II
EmS-No.	F-E, S-D
Marine pollutant	NP
Description	UN1133, Adhesives, 3, II, (-6°C c.c.)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

ADR

UN number or ID number	UN1133
UN proper shipping name	Adhesives
Transport hazard class(es)	3
Labels	3
Packing group	II
Description	UN1133, Adhesives, 3, II, (D/E)
Environmental hazards	No
Limited quantity (LQ)	5 L
Special Provisions	640D
Classification code	F1
Tunnel restriction code	(D/E)

Section 15: Regulatory information

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

EPA New Zealand HSNO approval code or group standard	HSR002669 - Surface Coatings and Colourants (Flammable, Carcinogenic)
National regulations	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
Certified handlers, tracking and controlled substance license requirements	Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Europe

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorization:
This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: Other information

Prepared By Product Stewardship and Regulatory Affairs
Revision date 26-Jan-2025
Revision Note
***Indicates updated data since last publication.
Key or legend to abbreviations and acronyms used in the safety data sheet

Legend
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

**	Hazard Designation	+	Sensitizers
C	Carcinogen		

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)
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)
Australia 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)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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