

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA HCS 2024 and Canada Hazardous Products Act (HPA) and
Hazardous Products Regulation (HPR), as amended

Issuing Date 12-Dec-2022

Revision date 28-May-2025

Revision Number 2

1. Identification

Product identifier

Product Name Ultra-Mark™ 2 Valve-Actuated Paint Marker

Other means of identification

Product Code(s) 832726, 832727

UN number or ID number UN1210

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Solvent based marker

Restrictions on use Keep away from children

Details of the supplier of the safety data sheet

Supplier Address

Kimball Midwest
4800 Roberts Road
Columbus Ohio
43228
Phone: 800-233-1294

Emergency telephone number

Emergency telephone 800-424-9300

2. Hazard(s) identification

Classification of the substance or mixture

Flammable liquids	Category 3
Specific target organ toxicity (single exposure)	Category 3
Category 3 Target organ effects: Narcotic effects.	

Label elements

Warning

Hazard statements

Flammable liquid and vapor.
May cause drowsiness or dizziness.

**Precautionary Statements - Prevention**

Avoid breathing vapors.
 Use only outdoors or in a well-ventilated area.
 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.
 Use explosion-proof electrical, ventilating and lighting equipment.
 Keep cool.

Precautionary Statements - Response**Skin**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 Call a POISON CENTER or doctor if you feel unwell.

Fire

In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Keep cool.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available.

Other information

May be harmful if swallowed. Very toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients**Substance**

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Propylene glycol monomethyl ether	107-98-2	50 - 100	-	-
Aluminum powder (stabilized)	7429-90-5	10 - 25	-	-
Copper	7440-50-8	10 - 25	-	-

4. First-aid measures

Description of first aid measures

General advice	Under normal conditions of use first aid is not required. Show this safety data sheet to the doctor in attendance.
Inhalation	If experiencing respiratory symptoms: Call a POISON CENTER or doctor.
Eye contact	IF IN EYES: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if symptoms occur.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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 breathing vapors.

Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Effects of Exposure	See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical, CO ₂ , alcohol-resistant foam or water spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Risk of ignition. The ink contained in this product is flammable but not readily ignited. 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.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions	Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapors. 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
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through spilled material.

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

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.

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

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin, eyes or clothing. Avoid breathing vapors. 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. In case of insufficient ventilation, wear suitable respiratory equipment.

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.

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.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Propylene glycol monomethyl ether 107-98-2	TWA: 50 ppm STEL: 100 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m ³	TWA: 100 ppm; TWA: 360 mg/m ³ ; STEL: 150 ppm STEL: 540 mg/m ³
Aluminum powder (stabilized) 7429-90-5	TWA: 1 mg/m ³ respirable particulate matter	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³	TWA: 10 mg/m ³ ; total dust TWA: 5 mg/m ³ ; respirable dust

	respirable fraction			
Copper 7440-50-8	TWA: 0.2 mg/m ³ fume	TWA: 0.1 mg/m ³ fume TWA: 1 mg/m ³ dust and mist (vacated) TWA: 0.1 mg/m ³ Cu dust, fume, mist		TWA: 1 mg/m ³ ; dust and mist TWA: 0.1 mg/m ³ ; fume IDLH: 100 mg/m ³ dust, fume and mist
Chemical name	Alberta	British Columbia	Ontario	Quebec
Propylene glycol monomethyl ether 107-98-2	TWA: 100 ppm; TWA: 369 mg/m ³ ; STEL: 150 ppm; STEL: 553 mg/m ³ ;	TWA: 50 ppm; STEL: 100 ppm;	TWA: 50 ppm; STEL: 100 ppm;	TWAEV: 50 ppm; STEV: 100 ppm;
Aluminum powder (stabilized) 7429-90-5	TWA: 10 mg/m ³ ; dust	TWA: 1.0 mg/m ³ ; respirable	TWA: 1 mg/m ³ ; respirable particulate matter	TWAEV: 5 mg/m ³ ;
Copper 7440-50-8	TWA: 0.2 mg/m ³ ; fume TWA: 1 mg/m ³ ; dust and mist	TWA: 1 mg/m ³ ; dust and mist TWA: 0.2 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume TWA: 1 mg/m ³ ; dust and mist	TWAEV: 0.2 mg/m ³ ; fume TWAEV: 1 mg/m ³ ; dust and mist

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Propylene glycol monomethyl ether	TWA: 50 ppm; STEL: 100 ppm;	TWA: 50 ppm; STEL: 100 ppm;	TWA: 50 ppm; STEL: 100 ppm;	TWA: 50 ppm; STEL: 100 ppm;
Aluminum powder (stabilized)	TWA: 1 mg/m ³ ; respirable particulate matter	TWA: 1 mg/m ³ ; respirable fraction	TWA: 1 mg/m ³ ; respirable particulate matter	TWA: 1 mg/m ³ ; respirable particulate matter
Copper	TWA: 0.2 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Propylene glycol monomethyl ether	TWA: 100 ppm; STEL: 150 ppm;	TWA: 50 ppm; STEL: 100 ppm;	TWA: 100 ppm; STEL: 150 ppm;	TWA: 100 ppm; TWA: 360 mg/m ³ ; STEL: 150 ppm; STEL: 450 mg/m ³ ;
Aluminum powder (stabilized)	TWA: 10 mg/m ³ ; dust STEL: 20 mg/m ³ ; dust	TWA: 1 mg/m ³ ; respirable particulate matter	TWA: 10 mg/m ³ ; dust STEL: 20 mg/m ³ ; dust	
Copper	TWA: 0.2 mg/m ³ ; fume TWA: 1 mg/m ³ ; dust and mist STEL: 3 mg/m ³ ; dust and mist STEL: 0.6 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume	TWA: 0.2 mg/m ³ ; fume TWA: 1 mg/m ³ ; dust and mist STEL: 0.6 mg/m ³ ; fume STEL: 3 mg/m ³ ; dust and mist	TWA: 0.2 mg/m ³ ; fume TWA: 1 mg/m ³ ; dust and mist STEL: 0.2 mg/m ³ ; fume STEL: 2 mg/m ³ ; dust and mist

Note

See section 16 for terms and abbreviations.

Other information on limit values

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

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.
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.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Varies
Odor (includes odor threshold)	Alcohol-like

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point		No data available
Boiling point (or initial boiling point or boiling range)	120 °C / 248 °F	
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	31 °C / 87.8 °F	
Autoignition temperature		Does not ignite
Decomposition temperature		No data available
SADT (°C)		No data available
pH		No data available
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available
Solubility		No data available
Water solubility	Miscible in water	
Partition coefficient n-octanol/water (log value)		No data available
Vapor pressure (includes evaporation rate)		No data available
Evaporation rate		No data available
Density and/or relative density		No data available
Bulk density		No data available
Liquid Density		No data available
Relative vapor density		No data available
Particle characteristics		
Particle Size		No data available
Particle Size Distribution		No data available

Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

Information with regard to physical hazard classes

Explosives	
Explosive properties	No information available
Oxidizing properties	No information available

10. Stability and reactivity

Reactivity	None under normal use conditions.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Incompatible materials.
Incompatible materials	Strong acids, Strong bases.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause drowsiness or dizziness. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Eye contact	Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available. May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
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Acute toxicity

Numerical measures of toxicity

The following ATE values have been calculated for the mixture:

ATEmix (oral)	> 2,000 mg/kg
ATEmix (inhalation-dust/mist)	> 5 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene glycol monomethyl ether	= 5000 mg/kg (Rat)	= 13 g/kg (Rabbit)	> 7559 ppm (Rat) 6 h
Aluminum powder (stabilized)	-	-	> 0.888 mg/L (Rat) 4 h
Copper	-	-	> 5.11 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	No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity

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

Chemical name	ACGIH	IARC	NTP	OSHA
Propylene glycol monomethyl ether 107-98-2	A4 - Not classifiable as a human carcinogen	-	-	-
Aluminum powder (stabilized) 7429-90-5	A4 - Not classifiable as a human carcinogen	-	-	-

Reproductive toxicity No information available.

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Propylene glycol monomethyl ether 107-98-2	-	LC50: =20.8g/L (96h, Pimephales promelas)	-	EC50: =23300mg/L (48h, Daphnia magna)
Copper 7440-50-8	EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata) EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h, Pimephales promelas) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h, Oncorhynchus mykiss) LC50: =1.25mg/L (96h, Lepomis macrochirus) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =0.112mg/L (96h, Poecilia reticulata)	-	EC50: =0.03mg/L (48h, Daphnia magna)

Persistence and degradability No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Propylene glycol monomethyl ether 107-98-2	1

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Should not be released into the environment, Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

California waste information This product contains one or more substances that are listed with the State of California as a hazardous waste.

14. Transport information

DOT

UN number or ID number	UN1210
Proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	III
Reportable quantity (lbs)	Copper: RQ (lb)= 5000.00, Zinc: RQ (lb)= 1000.00
Reportable quantity (lbs) (calculated)	Copper: RQ (lb)= 20008.00, Zinc: RQ (lb)= 10000.00
Reportable quantity (kg)	(Copper: RQ (kg)= 2270.00, Zinc: RQ (kg)= 454.00)
Reportable quantity (kg) (calculated)	Copper: RQ (kg)= 9083.63, Zinc: RQ (kg)= 4540.00
Special Provisions	B1, IB3, T2, TP1, 367
DOT Marine Pollutant	PP
Marine pollutant	Copper
Description	UN1210, Printing ink, 3, III
Emergency Response Guide Number	129

TDG

UN number or ID number	UN1210
Proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	III
Special Provisions	59, 142
Marine pollutant	Copper.
Description	UN1210, Printing ink, 3, III

IATA

UN number or ID number	UN1210
UN proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	III
Environmental hazards	Yes
Special Provisions	A3, A72, A192
ERG Code	3L
Description	UN1210, Printing ink, 3, III

IMDG

UN number or ID number	UN1210
UN proper shipping name	Printing ink
Transport hazard class(es)	3
Packing group	III
Marine pollutant indicator	P
Marine pollutant name	Copper, Zinc
Special Provisions	163, 223, 367, 955
EmS-No.	F-E, S-D
Description	UN1210, Printing ink, 3, III, (31°C c.c.), Marine pollutant

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****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

International Inventories

Contact supplier for inventory compliance status

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Aluminum powder (stabilized) - 7429-90-5	1.0
Copper - 7440-50-8	1.0
Zinc - 7440-66-6	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol monomethyl ether 107-98-2	X	X	X
Aluminum powder (stabilized) 7429-90-5	X	X	X
Copper 7440-50-8	X	X	X
Zinc 7440-66-6	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 1 Flammability 3 Instability 0 Special hazards -
HMIS Health hazards 2 Flammability 3 Physical hazards 0 Personal protection X

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

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization

KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NTP	National Toxicology Program (United States)
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

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

U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)

U.S. 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
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)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Issuing Date 12-Dec-2022

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Revision Note Change in the mixture classification. Updated format. SDS sections updated. 2, 3, 4, 5, 6, 7, 8, 10, 11, 12.

Disclaimer

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that the supplier believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of the supplier's control, the supplier makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

End of Safety Data Sheet