



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

Revision date 24-Aug-2026

Revision Number 1

1. Identification

Product identifier

Product Name MIDSUN SILPROCOAT GRAY MINERAL SPIRITS

Product Code(s) S1922MMS

Synonyms S1922MMS-5

Other means of identification

Recommended use of the chemical and restrictions on use

Recommended use For professional use only, Coatings

Restrictions on use Not intended for consumer sale or use. Use only as directed.

Details of the supplier of the safety data sheet

Manufacturer Address

MIDSUN GROUP
135 Redstone St.
Southington, CT 06489
1-860-378-0100 • info@midsungroup.com • midsungroup.com

Emergency Telephone For Chemical Emergency - Spill, Leak, Fire, Exposure, or Incident
Call CHEMTREC
Within USA and Canada Toll Free: 1-800-424-9300 Local: +1-703-527-3887
Outside USA and Canada: +1-703-527-3887 (collect calls accepted)

2. Hazard(s) identification

Classification of the substance or mixture

Flammable liquids	Category 3
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration hazard	Category 1

Hazards not otherwise classified (HNOC)

Not applicable.

Label elements



Danger

Hazard statements

Flammable liquid and vapor.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust, fume, gas, mist, vapors and spray.
Keep container tightly closed.
Use explosion-proof electrical, ventilating and lighting equipment.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Ground and bond container and receiving equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label).
IF exposed or concerned: Get medical advice and attention.
Get medical advice and attention if you feel unwell.
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 and attention.
If skin irritation or rash occurs: Get medical advice and attention.
Take off contaminated clothing and wash it before reuse.
IF ON SKIN: Wash with plenty of water and soap.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor.
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 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 in contact with skin. Causes mild skin irritation. Harmful to aquatic life. Toxic to aquatic life with long lasting effects.

California Proposition 65

**WARNING**

This product can expose you to chemicals including Toluene, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%
Distillates, petroleum, hydrotreated light	64742-47-8	15 = < 20
2-Butanone, O,O',O''- (methylsilylidyne) trioxime	22984-54-9	3 = < 5
Titanium Dioxide	13463-67-7	1 = < 3
Octamethylcyclotetrasiloxane	556-67-2	0.1 = <1.0

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

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

ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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 direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed**Symptoms**

Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause

redness and irritation.

Effects of Exposure

May cause cancer. May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility. May cause damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

Note to physicians

May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

Suitable Extinguishing Media

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

Unsuitable extinguishing media

Do not scatter spilled material with high pressure water streams.

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.

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 protective equipment.

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.

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 protective 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 must 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 protective gloves, eye protection and 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. Keep out of the reach of children. Store away from other materials.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Titanium Dioxide 13463-67-7 (1 = < 3 %)	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	TWA: 2.4 mg/m ³ ; CIB 63 fine TWA: 0.3 mg/m ³ ; CIB 63 ultrafine, including engineered nanoscale IDLH: 5000 mg/m ³

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).

Biological occupational exposure limits

This product, as supplied, contains materials that do not have reportable biological exposure limits or are not subject to the reporting requirements of the local jurisdiction.

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. Antistatic boots. Chemical resistant apron. Wear fire resistant or flame retardant clothing.
Respiratory protection	Use appropriate respiratory protection. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Appearance	Viscous
Physical state	Liquid
Color	Gray
VOC content	250.45 g/L (2.09 lb/gal) EPA Method 24 (as applied)

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	< 0 °C / 32 °F	None known
Boiling point (or initial boiling point or boiling range)	> 100 °C / 212 °F	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	44.4 °C / 111.92 °F	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature		None known
Decomposition temperature		None known
SADT (°C)	No data available	None known
pH	No data available	Not applicable
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	2500 cps	@ 25 °C
Solubility	No data available	None known
Water solubility	Insoluble in water	None known
Partition coefficient n-octanol/water (log value)	No data available	None known
Vapor pressure (includes evaporation rate)	No data available	None known
Evaporation rate		None known
Density and/or relative density	1.22	None known
Bulk density	No data available	
Liquid Density	10.18 lb/gal	
Relative vapor density		None known
Particle characteristics		None known
Particle Size	No data available	
Particle Size Distribution	No data available	

Other information

Odor (includes odor threshold)	Solvent-like odor
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10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	None known based on information supplied.
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. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation. 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). Repeated exposure may cause skin dryness or cracking. Prolonged contact may cause redness and irritation. Causes mild skin irritation. May be harmful in contact with skin.
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Prolonged contact may cause redness and irritation.
Acute toxicity	No information available.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	8,550.10 mg/kg
ATEmix (dermal)	4,721.60 mg/kg
ATEmix (inhalation-dust/mist)	8.66 mg/L

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates, petroleum, hydrotreated light 64742-47-8 (15 = < 20 %)	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
2-Butanone, O,O',O"- (methylsilylydyne) trioxime 22984-54-9 (3 = < 5 %)	-	> 2000 mg/kg (Rat)	-
Titanium Dioxide 13463-67-7 (1 = < 3 %)	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h
Octamethylcyclotetrasiloxane 556-67-2 (0.1 = < 1.0 %)	= 1540 mg/kg (Rat)	> 2375 mg/kg (Rat)	= 36 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. Causes mild skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No information available.
Carcinogenicity	No significant exposure to primary particles of silica quartz is thought to occur during the use of products in which silica quartz is bound to other materials, such as in paints, adhesives, and articles. No significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints, adhesives, and articles. No significant exposure to primary particles of carbon black is thought to occur during the use of products in which carbon black is bound to other materials, such as in paints, adhesives, and articles. Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

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

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide 13463-67-7 (1 = < 3 %)	A3 - Confirmed animal carcinogen (with unknown relevance to humans)	Group 2B - Possibly carcinogenic to humans	-	Present

Reproductive toxicity	Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.
STOT - single exposure	No information available.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.
Other adverse effects	No information available.
Interactive effects	No information available.

12. Ecological information

<u>Ecotoxicity</u>	Toxic to aquatic life with long lasting effects. Harmful to aquatic life.
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Aquatic ecotoxicity**Component Information**

Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms
Distillates, petroleum, hydrotreated light 64742-47-8 (15 = < 20 %)	LC50: =45mg/L (96h, Pimephales promelas) LC50: =2.2mg/L (96h, Lepomis macrochirus) LC50: =2.4mg/L (96h, Oncorhynchus mykiss)	-	-	-
Octamethylcyclotetrasiloxane 556-67-2 (0.1 = <1.0 %)	LC50: >500mg/L (96h, Brachydanio rerio) LC50: >1000mg/L (96h, Lepomis macrochirus)	-	-	-

Persistence and degradability No information available.

Bioaccumulative potential

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Distillates, petroleum, hydrotreated light 64742-47-8 (15 = < 20 %)	-	159	-
Octamethylcyclotetrasiloxane 556-67-2 (0.1 = <1.0 %)	6.488	12400	-

Mobility in soil No information available.

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.

14. Transport information

DOT

Notes	DOT Ground: Non-Bulk (<119 gallons (450 liters)) ships as Not hazardous for transport under exception 173.150 (f)
UN number or ID number	NA1993
Proper shipping name	Combustible liquid, n.o.s.
Transport hazard class(es)	Combustible liquid
Packing group	III
Special Provisions	IB3, T1, TP1, 148
DOT Marine Pollutant	I
Marine pollutant	Octamethylcyclotetrasiloxane
Description	NA1993, Combustible liquid, n.o.s. (Distillates, petroleum, hydrotreated light, 2-Butanone, O,O',O"- (methylsilyldiylne) trioxime), III, Marine pollutant (Octamethylcyclotetrasiloxane)
Emergency Response Guide Number	128

TDG

UN number or ID number	UN1139
UN proper shipping name	Coating solution
Transport hazard class(es)	3
Packing group	III
Marine pollutant name	Octamethylcyclotetrasiloxane.
Description	UN1139, Coating solution, 3, III

MEX

UN number or ID number	UN1139
UN proper shipping name	Coating solution
Transport hazard class(es)	3
Packing group	III
Description	UN1139, Coating solution, 3, III
Special Provisions	223

ICAO (air)

UN number or ID number	UN1139
UN proper shipping name	Coating solution
Transport hazard class(es)	3
Packing group	III
Description	UN1139, Coating solution, 3, III
Special Provisions	A3

IATA

UN number or ID number	UN1139
UN proper shipping name	Coating solution
Transport hazard class(es)	3
Packing group	III
Environmental hazards	Yes
Special Provisions	A3
ERG Code	3L
Description	UN1139, Coating solution, 3, III

IMDG

UN number or ID number	UN1139
UN proper shipping name	COATING SOLUTION
Transport hazard class(es)	3
Packing group	III
Marine pollutant indicator	P
Marine pollutant	Octamethylcyclotetrasiloxane
Special Provisions	955
EmS-No.	F-E, <u>S-E</u>
Underlined EMS codes indicate additional advice is given in the emergency response procedures	
Description	UN1139, COATING SOLUTION, 3, III, (44.4°C C.C.), Marine pollutant

15. Regulatory 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

International Inventories

TSCA Complies.

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements.

DSL/NDL Complies.

EINECS/ELINCS Complies.

ENCS Complies.

IECSC Complies.

KECI Complies.

PICCS Complies.

AIIC Complies.

NZIoC Complies.

TCSI Complies.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

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 %
Toluene 108-88-3 (< 0.1 %)	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 does not contain any substances regulated as 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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Toluene 108-88-3 ($< 0.1\%$)	Developmental

**WARNING**

This product can expose you to chemicals including Toluene, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Titanium Dioxide 13463-67-7 ($1 = < 3\%$)	X	X	X
Silicon Dioxide, Amorphous 7631-86-9 ($0.1 = < 1.0\%$)	X	X	X
Carbon Black 1333-86-4 ($< 0.1\%$)	X	X	X
Toluene 108-88-3 ($< 0.1\%$)	X	X	X
Zirconium oxide (ZrO ₂) 1314-23-4 ($< 0.1\%$)	-	X	-
Ethanol 64-17-5 ($< 0.01\%$)	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Other Regulations**International Living Future Institute - Living Building Challenge (LBC) - Red List**

This product does not contain Red Listed substances.

16. Other information

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

Chronic Hazard Star Legend

* = Chronic Health Hazard

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

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	Korea 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 content lb/gal	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. Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 U.S. Environmental Protection Agency
 U.S. EPA 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
 U.S. Hazardous Substance Data Bank (HSDB)
 International Uniform Chemical Information Database (IUCLID)
 Japan National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 U.S. National Institute for Occupational Safety and Health (NIOSH)
 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)
 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)

Revision date 24-Aug-2026

Revision Note No information available.

Disclaimer

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End of Safety Data Sheet