



# 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** 31-Jul-2025

**Revision date** 31-Jul-2025

**Revision Number** 1

## 1. Identification

### Product identifier

**Product Name** AMSOIL Non-Chlorinated Brake and Parts Cleaner

### Other means of identification

**Product Code(s)** NCBCSC

**UN number or ID number** UN1950

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended use** Brake Cleaner

**Restrictions on use** Use only for intended applications

### Details of the supplier of the safety data sheet

#### Supplier Address

AMSOIL INC.  
Bay Adelaide Centre, East Tower  
22 Adelaide St. W  
Toronto, ON, Canada M5H 4E3  
T:+1 877-822-5172

#### Manufacturer Address

AMSOIL INC.  
One AMSOIL Center  
Superior, WI 54880, USA  
T: +1 715-392-7101

**E-mail** compliance@amsoil.com

### Emergency telephone number

**Emergency telephone** CHEMTRIC: Within USA and Canada: 1-800-424-9300  
Outside the USA and Canada: +1 703-741-5970  
(collect calls accepted) 24/7

## 2. Hazard(s) identification

### Classification of the substance or mixture

Aerosols	Category 1
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Category 3 Target organ effects: Narcotic effects.	

### Label elements

**Danger**

### **Hazard statements**

Extremely flammable aerosol.

Pressurized container: May burst if heated.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.  
Avoid breathing dust, fume, gas, mist, vapors and spray.  
Use only outdoors or in a well-ventilated area.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not pierce or burn, even after use.  
Do not spray on an open flame or other ignition source.  
Wear protective gloves, protective clothing, eye protection and face protection.

**Precautionary Statements - Response**

Specific treatment (see supplemental first aid instructions on this label).

**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 and attention.

**Skin**

IF ON SKIN: Wash with plenty of water and soap.  
If skin irritation occurs: Get medical advice and attention.  
Take off contaminated clothing and wash it before reuse.

**Inhalation**

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

**Precautionary Statements - Storage**

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

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**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 inhaled.

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

Not applicable.

**Mixture**

Chemical name	CAS No.	Weight-%
Acetone	67-64-1	75-90
Heptane, branched, cyclic and linear	426260-76-6	5-10
Carbon dioxide	124-38-9	5-10

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

**Chemical Additions**

No information available.

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

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	IF INHALED: Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	IF IN EYES: Do not rub affected area. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	IF ON SKIN: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	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. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.

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

<b>Symptoms</b>	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.
<b>Effects of Exposure</b>	None known.

**Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
---------------------------	------------------------

**5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Dry chemical. Carbon dioxide (CO2). Water spray.
<b>Unsuitable extinguishing media</b>	DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
<b>Specific hazards arising from the chemical</b>	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. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated.
<b>Hazardous combustion products</b>	Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	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. 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). Take precautionary measures against static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray.

**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.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. 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. Flood with water to complete polymerization and scrape off floor.

**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.

**Reference to other sections** For additional information see: Section 8: Exposure controls/personal protection; Section 12: Ecological information; Section 13: Disposal considerations.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Use personal protection equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use spark-proof tools and explosion-proof equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Keep in an area equipped with sprinklers. Do not puncture or incinerate cans. Contents under pressure. In case of rupture. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. 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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protect from sunlight. 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 in a cool, dry area away from potential sources of heat, open flames, sunlight or other chemicals.

## 8. Exposure controls/personal protection

### Control Parameters

#### Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here. Under conditions which may generate mists, the following exposure limits are recommended: Long-term exposure limit (8-hour TWA): 5 mg/m<sup>3</sup>. Short-term exposure limit (15-minute): 10 mg/m<sup>3</sup>.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Acetone 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors. (vacated) STEL: 1000 ppm	TWA: 250 ppm; TWA: 590 mg/m <sup>3</sup> ; IDLH: 2500 ppm
Carbon dioxide 124-38-9	TWA: 5000 ppm STEL: 30000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m <sup>3</sup> (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m <sup>3</sup>	TWA: 5000 ppm; TWA: 9000 mg/m <sup>3</sup> ; STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup> IDLH: 40000 ppm

Chemical name	Alberta	British Columbia	Ontario	Quebec
Acetone 67-64-1	TWA: 500 ppm; TWA: 1200 mg/m <sup>3</sup> ; STEL: 750 ppm; STEL: 1800 mg/m <sup>3</sup> ;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWAEV: 250 ppm; STEV: 500 ppm;
Carbon dioxide 124-38-9	TWA: 5000 ppm; TWA: 9000 mg/m <sup>3</sup> ; STEL: 30000 ppm; STEL: 54000 mg/m <sup>3</sup> ;	TWA: 5000 ppm; STEL: 15000 ppm;	TWA: 5000 ppm; STEL: 30000 ppm;	TWAEV: 5000 ppm; TWAEV: 9000 mg/m <sup>3</sup> ; STEV: 30000 ppm; STEV: 54000 mg/m <sup>3</sup> ;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Acetone	TWA: 250 ppm; STEL: 500 ppm;			
Carbon dioxide	TWA: 5000 ppm; STEL: 30000 ppm;			

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Acetone	TWA: 500 ppm; STEL: 750 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 500 ppm; STEL: 750 ppm;	TWA: 1000 ppm; TWA: 2400 mg/m <sup>3</sup> ; STEL: 1250 ppm; STEL: 3000 mg/m <sup>3</sup> ;
Carbon dioxide	TWA: 5000 ppm; STEL: 30000 ppm;	TWA: 5000 ppm; STEL: 30000 ppm;	TWA: 5000 ppm; STEL: 30000 ppm;	TWA: 5000 ppm; TWA: 9000 mg/m <sup>3</sup> ; STEL: 15000 ppm; STEL: 27000 mg/m <sup>3</sup> ;

#### 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**

Chemical name	ACGIH
Acetone 67-64-1	25 mg/L - urine (Acetone) - end of shift

**Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

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

**Hand protection** Wear suitable gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing. Antistatic boots. Chemical resistant apron. Wear fire/flame resistant/retardant 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. Use appropriate respiratory protection.

**Environmental exposure controls** Avoid release to the environment.

**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. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing.

## 9. Physical and chemical properties

**Information on basic physical and chemical properties**

<b>Appearance</b>	Aerosol
<b>Physical state</b>	Liquid
<b>Color</b>	Colorless
<b>Odor (includes odor threshold)</b>	Acetone

<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>
<b>Melting point / freezing point</b>		No data available
<b>Boiling point (or initial boiling point or boiling range)</b>	56 °C / 132.8 °F	Acetone
<b>Flammability</b>		No data available
<b>Flammability Limit in Air</b>		
Upper flammability or explosive limits	12.8% v/v	Acetone
Lower flammability or explosive limits	2.5%	No data available
<b>Flash point</b>	-17 °C / 1.4 °F	Acetone
<b>Autoignition temperature</b>	465 °C / 869.0 °F	Acetone
<b>Decomposition temperature</b>		No data available
SADT (°C)		No data available
<b>pH</b>		No data available
pH (as aqueous solution)		No data available
<b>Kinematic viscosity</b>	<20	No data available
<b>Dynamic viscosity</b>		No data available
<b>Solubility</b>		No data available
<b>Water solubility</b>		No data available

<b>Partition coefficient n-octanol/water (log value)</b>	No data available
<b>Vapor pressure (includes evaporation rate)</b>	$2.4 \times 10^4$
Evaporation rate	Acetone
<b>Density and/or relative density</b>	No data available
Bulk density	No data available
Liquid Density	No data available
Relative vapor density	No data available
<b>Particle characteristics</b>	No data available
Particle Size	No data available
Particle Size Distribution	No data available
<b>Other information</b>	
<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Softening point</b>	No information available

#### Information with regard to physical hazard classes

##### **Explosives**

Explosive properties	No information available
<b>Oxidizing properties</b>	No information available

## 10. Stability and reactivity

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

## 11. Toxicological information

#### Information on likely routes of exposure

##### **Product Information**

<b>Inhalation</b>	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness. May be harmful if inhaled.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye irritation. May cause redness, itching, and pain.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Redness. 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** Based on available data, the classification criteria are not met.

#### Numerical measures of toxicity

The following ATE values have been calculated for the mixture:

ATEmix (inhalation-dust/mist) >5 mg/l

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetone	= 5800 mg/kg ( Rat )	> 15700 mg/kg ( Rabbit )	= 50100 mg/m <sup>3</sup> ( Rat ) 8 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 skin irritation.

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

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

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

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

Chemical name	ACGIH	IARC	NTP	OSHA
Acetone 67-64-1	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** Due to the viscosity, this product does not present an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Acetone 67-64-1	-	LC50: 4.74 - 6.33mL/L (96h, <i>Oncorhynchus mykiss</i> ) LC50: 6210 - 8120mg/L (96h, <i>Pimephales promelas</i> ) LC50: =8300mg/L (96h, <i>Lepomis macrochirus</i> )	-	EC50: 10294 - 17704mg/L (48h, <i>Daphnia magna</i> ) EC50: 12600 - 12700mg/L (48h, <i>Daphnia magna</i> )

**Persistence and degradability** No information available.

#### Bioaccumulation

**Component Information**

Chemical name	Partition coefficient
Acetone 67-64-1	-0.24

**Other adverse effects**

No information available.

**13. Disposal considerations****Disposal methods**

<b>Waste from residues/unused products</b>	Should not be released into the environment, Dispose of in accordance with local regulations, Dispose of waste in accordance with environmental legislation.
<b>Contaminated packaging</b>	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.
<b>California waste information</b>	This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. Transport information****DOT**

<b>UN number or ID number</b>	UN1950
<b>Proper shipping name</b>	Aerosols
<b>Transport hazard class(es)</b>	2.1
<b>Reportable quantity (lbs)</b>	Acetone: RQ (lb)= 5000.00
<b>Reportable quantity (lbs) (calculated)</b>	Acetone: RQ (lb)= 6002.00
<b>Reportable quantity (kg)</b>	(Acetone: RQ (kg)= 2270.00)
<b>Reportable quantity (kg) (calculated)</b>	Acetone: RQ (kg)= 2725.09
<b>Special Provisions</b>	N82
<b>DOT Marine Pollutant</b>	NP
<b>Description</b>	UN1950, Aerosols, 2.1
<b>Emergency Response Guide Number</b>	126

**TDG**

<b>UN number or ID number</b>	UN1950
<b>Proper shipping name</b>	Aerosols
<b>Transport hazard class(es)</b>	2.1
<b>Description</b>	UN1950, Aerosols, 2.1

**IATA**

<b>UN number or ID number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable
<b>Transport hazard class(es)</b>	2.1
<b>Environmental hazards</b>	No
<b>Special Provisions</b>	A145, A167, A802
<b>ERG Code</b>	10L
<b>Description</b>	UN1950, Aerosols, flammable, 2.1

**IMDG**

UN number or ID number	UN1950
UN proper shipping name	Aerosols
Transport hazard class(es)	2.1
Marine pollutant indicator	NP
Special Provisions	63,190, 277, 327, 344, 381, 959
EmS-No.	F-D, S-U
Description	UN1950, Aerosols, 2.1, (-17°C c.c.)

## 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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Acetone 67-64-1	5000 lb / 2270 kg (final RQ)	-

#### 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
Acetone 67-64-1	X	X	X
Carbon dioxide 124-38-9	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 4	<b>Instability</b> 0	<b>Special hazards -</b>
<b>HMIS</b>	<b>Health hazards</b> 2	<b>Flammability</b> 4	<b>Physical hazards</b> 0	<b>Personal protection</b> 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** 31-Jul-2025

**Revision date** 31-Jul-2025

**Revision Note** Initial Release.

**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**