



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS
which includes the amended Hazardous Products Act (HPA) and the Hazardous Products
Regulation (HPR)

Revision Date 12-Dec-2024

Version 1

1. Identification

Product identifier

Product Name PX HEAVY DUTY HEADLINER & CARPET ADHESIVE 16.75OZ AE

Other means of identification

Product Code 27828
UN number or ID number 1950
Synonyms CAN Item Number 27829

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive (Spray, Special Purpose): Automotive Headliner
Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address ITW Permatex, Inc. 6875 Parkland Blvd. Solon, Ohio 44139 USA Telephone: 1-87-Permatex (866) 732-9502	May Also Be Distributed by: ITW Permatex Canada 101-2360 Bristol Circle Oakville, ON Canada L6H 6M5 Telephone: (800) 924-6994
---	--

E-mail address mail@permatex.com

Emergency telephone number

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Aerosols	Category 1
Skin corrosion/irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration hazard	Category 1

Label elements

Contains 2-Methylpentane; CYCLOHEXANE; ACETONE



Danger

Hazard statements

Extremely flammable aerosol. Pressurized container: May burst if heated.
Causes skin irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves.
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.

Precautionary Statements - Response

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

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.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor.
Do NOT induce vomiting.

Precautionary Statements - Storage

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

80 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
80 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
95 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information

May be harmful in contact with skin. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Synonyms CAN Item Number 27829.

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
DIMETHYL ETHER	115-10-6	30-60%	-	-
2-Methylpentane	107-83-5	30-60%	-	-
CYCLOHEXANE	110-82-7	10-30%	-	-
ACETONE	67-64-1	3-7%	-	-

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 Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. 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. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. 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. Wear personal protective clothing (see section 8). Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians 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.
Small Fire	In case of fire, use water spray, foam, dry chemical, or CO2.
Large Fire	In case of fire, use water spray, foam, dry chemical, or CO2.
Unsuitable extinguishing media	DO NOT EXTINGUISH A LEAKING GAS FIRE UNLESS LEAK CAN BE STOPPED.
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. Cylinders may rupture under extreme heat. Damaged cylinders should be handled only by specialists. Containers may explode when heated.
Hazardous combustion products	No information available.
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. 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.

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.
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. 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. Handle in accordance with good industrial hygiene and safety practice. 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.
--------------------------------	---

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. 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
2-Methylpentane 107-83-5	TWA: 200 ppm	-	-
CYCLOHEXANE 110-82-7	TWA: 100 ppm	TWA: 300 ppm TWA: 1050 mg/m ³ (vacated) TWA: 300 ppm (vacated) TWA: 1050 mg/m ³	TWA: 300 ppm; TWA: 1050 mg/m ³ ; IDLH: 1300 ppm
ACETONE 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ 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 ³ ; IDLH: 2500 ppm

Chemical name	Alberta	British Columbia	Ontario	Quebec
DIMETHYL ETHER 115-10-6	-	TWA: 1000 ppm;	-	-
2-Methylpentane 107-83-5	TWA: 500 ppm; TWA: 1760 mg/m ³ ; STEL: 1000 ppm; STEL: 3500 mg/m ³ ;	TWA: 200 ppm;	TWA: 500 ppm; STEL: 1000 ppm;	-
CYCLOHEXANE 110-82-7	TWA: 100 ppm; TWA: 344 mg/m ³ ;	TWA: 100 ppm;	TWA: 100 ppm;	TWAEV: 300 ppm; TWAEV: 1030 mg/m ³ ;
ACETONE 67-64-1	TWA: 500 ppm; TWA: 1200 mg/m ³ ; STEL: 750 ppm; STEL: 1800 mg/m ³ ;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWAEV: 250 ppm; STEV: 500 ppm;

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
2-Methylpentane	TWA: 200 ppm;	TWA: 500 ppm; STEL: 1000 ppm;	TWA: 200 ppm;	TWA: 200 ppm;
CYCLOHEXANE	TWA: 100 ppm;	TWA: 100 ppm;	TWA: 100 ppm;	TWA: 100 ppm;
ACETONE	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
---------------	---------	----------------------	--------------	-------

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
2-Methylpentane		TWA: 200 ppm;		
CYCLOHEXANE	TWA: 100 ppm; STEL: 150 ppm;	TWA: 100 ppm;	TWA: 100 ppm; STEL: 150 ppm;	TWA: 300 ppm; TWA: 1050 mg/m ³ ; STEL: 375 ppm; STEL: 1300 mg/m ³ ;
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 ³ ; STEL: 1250 ppm; STEL: 3000 mg/m ³ ;

Biological occupational exposure limits

Chemical name	ACGIH
CYCLOHEXANE 110-82-7	50 mg/g creatinine - urine (1,2-Cyclohexanediol) - end of shift at end of workweek
ACETONE 67-64-1	25 mg/L - urine (Acetone) - end of shift

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Tight sealing safety 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 Use appropriate respiratory protection.

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.

Thermal hazards No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid Aerosol
Appearance No information available
Color Colorless
Odor No information available
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	< -20 °C / -4 °F	Extremely Flammable Aerosol Gives a flame

projection at full valve opening or flashback at any degree of valve opening

Evaporation rate	Not applicable
Flammability (solid, gas)	No data available
Flammability Limit in Air	
Upper flammability limit:	9.5%
Lower flammability limit:	2.1%
Vapor pressure	No data available
Vapor density	>1
Relative density	0.7
Water solubility	No Data Available
Solubility(ies)	No data available
Partition coefficient	No data available
Autoignition temperature	450 °C / 842 °F
Decomposition temperature	No data available
Kinematic viscosity	<20 cSt
Dynamic viscosity	No data available
Particle characteristics	
Particle Size	No data available
Particle Size Distribution	No data available

Air = 1

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. 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. May cause drowsiness or dizziness.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

Ingestion

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

Difficulty in breathing. Coughing and/ or wheezing. Dizziness. 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

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	9,790.90 mg/kg
ATEmix (dermal)	2,558.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	100.20 mg/l

- 80 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 80 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 95 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
DIMETHYL ETHER 115-10-6	-	-	= 164000 ppm (Rat) 4 h
CYCLOHEXANE 110-82-7	= 12705 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 32880 mg/m ³ (Rat) 4 h
ACETONE 67-64-1	= 5800 mg/kg (Rat)	> 15700 mg/kg (Rabbit)	= 50100 mg/m ³ (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

No information available.

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
2-Methylpentane 107-83-5	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	-	-	-
ACETONE 67-64-1	A4 - Not Classifiable as a Human Carcinogen	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

Reproductive toxicity No information available.

STOT - single exposure May cause drowsiness or dizziness.

STOT - repeated exposure No information available.

Aspiration hazard May be fatal if swallowed and enters airways.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
DIMETHYL ETHER 115-10-6	-	LC50: >4.1g/L (96h, <i>Poecilia reticulata</i>)	-	-
CYCLOHEXANE 110-82-7	EC50: >500mg/L (72h, <i>Desmodesmus subspicatus</i>)	LC50: 3.96 - 5.18mg/L (96h, <i>Pimephales promelas</i>) LC50: 23.03 - 42.07mg/L (96h, <i>Pimephales promelas</i>) LC50: 24.99 - 44.69mg/L (96h, <i>Lepomis macrochirus</i>) LC50: 48.87 - 68.76mg/L (96h, <i>Poecilia reticulata</i>)	-	-
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
DIMETHYL ETHER 115-10-6	-0.18
CYCLOHEXANE 110-82-7	3.93
ACETONE 67-64-1	-0.24

Other adverse effects No information available.

13. Disposal considerations

Waste treatment 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.
US EPA Waste Number	Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT

UN number or ID number	1950
Proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1
Emergency Response Guide Number	126

IATA

UN number or ID number	ID 8000
UN proper shipping name	Consumer Commodity
Transport hazard class(es)	9
ERG Code	9L
Special Provisions	A112

IMDG

UN number or ID number	1950
UN proper shipping name	Aerosols, Limited Quantity (LQ)
Transport hazard class(es)	2.1

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

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies

NZIoC Complies

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing Chemicals Inventory
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances
- NZIoC - New Zealand Inventory of Chemicals

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 %
CYCLOHEXANE - 110-82-7	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).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
CYCLOHEXANE 110-82-7	1000 lb	-	-	X

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	Reportable Quantity (RQ)
CYCLOHEXANE 110-82-7	1000 lb / kg (final RQ)	-	RQ 1000 lb final RQ RQ 454 kg final RQ
ACETONE 67-64-1	5000 lb / kg (final RQ)	-	RQ 5000 lb final RQ RQ 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
2-Methylpentane 107-83-5	X	X	X
DIMETHYL ETHER 115-10-6	X	X	X
CYCLOHEXANE 110-82-7	X	X	X
ACETONE 67-64-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

<u>NFPA</u>	Health hazards 2	Flammability 4	Instability 0	Special hazards -
<u>HMIS</u>	Health hazards 3	Flammability 4	Physical hazards 0	Personal protection X

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	*	Skin designation
+	Sensitizers		

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
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 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)
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 12-Dec-2024

Revision Note No information available.

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.