



SAFETY DATA SHEET

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

Revision date 25-Sep-2023

Revision Number 1

1. Identification

Product identifier

Product Name Phenolphthalein, 1% in 95% Ethanol

Other means of identification

Product Code(s) 9208

UN number or ID number UN1170

Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended use Industrial use
Laboratory use
Industrial Manufacturing (all)

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI 53925 USA
Phone: (920) 623-2140
Fax: (920) 623-2577
www.columbuschemical.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC: 1-800-424-9300 for US / 703-527-3887 outside US

Emergency Telephone 911

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 4
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)

Not applicable

Label elements**Danger****Hazard statements**

H302 - Harmful if swallowed

H311 - Toxic in contact with skin

H332 - Harmful if inhaled

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H361 - Suspected of damaging fertility or the unborn child

H370 - Causes damage to organs

H225 - Highly flammable liquid and vapor.

**Precautionary Statements - Prevention**

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

Precautionary Statements - Response

P321 - Specific treatment (see First-Aid Measures on SDS)

P307 + P311 - IF exposed: Call a POISON CENTER or doctor/physician

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P363 - Wash contaminated clothing before reuse

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

P370 + P378 - In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

P405 - Store locked up

P403 + P235 - Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Unknown acute toxicity

- 6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 91 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 91 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Other information

May be harmful if inhaled. Toxic to aquatic life with long lasting effects.

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

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Formula	Molecular Weight
Ethyl alcohol	64-17-5	83-85	C ₂ H ₅ OH	46.07 g/mol
Methanol	67-56-1	4-5	CH ₃ OH	32.04 g/mol
Water	7732-18-5	Balance	H ₂ O	18.00 g/mol
2-Pentanone, 4-methyl-	108-10-1	1-2	C ₅ H ₁₂ O	100.16 g/mol
Ethyl acetate	141-78-6	1-2	C ₄ H ₈ O ₂	88.11 g/mol
Phenolphthalein	77-09-8	05-1.5	C ₂₀ H ₁₄ O ₄	318.32 g/mol
Solvent naphtha, petroleum, light aliphatic	64742-89-8	<1	-	-

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. IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove to fresh air. IF exposed or concerned: Get medical advice/attention. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

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. Get immediate medical attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical attention.

Ingestion

Do NOT induce vomiting. 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 breathing vapors or mists.

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

Coughing and/ or wheezing. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO₂). Water spray. Alcohol resistant foam.
Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the chemical 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.

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). 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. Avoid breathing vapors or mists.

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.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid

contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. In case of insufficient ventilation, wear suitable respiratory equipment.

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. Keep out of the reach of children. Store locked up.

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.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Ethyl alcohol	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³ (vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m ³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m ³
Methanol	STEL: 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
2-Pentanone, 4-methyl-	STEL: 75 ppm TWA: 20 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 205 mg/m ³ (vacated) STEL: 75 ppm (vacated) STEL: 300 mg/m ³	IDLH: 500 ppm TWA: 50 ppm TWA: 205 mg/m ³ STEL: 75 ppm STEL: 300 mg/m ³
Ethyl acetate	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³

Biological occupational exposure limits

Chemical name	ACGIH
Methanol	15 mg/L - urine (Methanol) - end of shift
2-Pentanone, 4-methyl-	1 mg/L - urine (MIBK) - end of shift

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

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

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Mild alcohol
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	None known
Lower flammability or explosive limits	No data available	None known
Vapor pressure	No data available	None known
Relative vapor density	No data available	None known
Relative density	0.8297	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

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
Liquid 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.
Conditions to avoid	Heat, flames and sparks. Excessive heat.
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. Harmful by inhalation. (based on components). May be harmful if inhaled.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available. Toxic in contact with skin. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Coughing and/ or wheezing.
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Acute toxicity

Numerical measures of toxicity

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

ATEmix (oral)	1,578.40 mg/kg
ATEmix (dermal)	515.90 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	17.90 mg/l
ATEmix (inhalation-dust/mist)	8.31 mg/l

Unknown acute toxicity

- 6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 91 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 91 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethyl alcohol	= 7060 mg/kg (Rat)	-	= 116.9 mg/L (Rat) 4 h

			= 133.8 mg/L (Rat) 4 h = 22500 ppm (Rat) 8 h
Methanol	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	
Water	>90 mL/kg (Rat)	-	-
2-Pentanone, 4-methyl-	= 2080 mg/kg (Rat)	= 3000 mg/kg (Rabbit)	2000 - 4000 ppm (Rat) 4 h
Ethyl acetate	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit)	= 4000 ppm (Rat) 4 h
Solvent naphtha, petroleum, light aliphatic	-	= 3000 mg/kg (Rabbit)	-

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 Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.

Carcinogenicity 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
Ethyl alcohol	A3	Group 1	Known	X
2-Pentanone, 4-methyl-	A3	Group 2B	-	X
Phenolphthalein	-	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.

STOT - single exposure Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

STOT - repeated exposure No information available.

Target organ effects Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood,

Gastrointestinal tract (GI), Reproductive system.

Aspiration hazard No information available.**Other adverse effects** No information available.**Interactive effects** No information available.**12. Ecological information****Ecotoxicity** Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethyl alcohol	-	LC50: 12.0 - 16.0mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: >100mg/L (96h, <i>Pimephales promelas</i>) LC50: 13400 - 15100mg/L (96h, <i>Pimephales promelas</i>)	-	LC50: 9268 - 14221mg/L (48h, <i>Daphnia magna</i>) EC50: =2mg/L (48h, <i>Daphnia magna</i>)
Methanol	-	LC50: =28200mg/L (96h, <i>Pimephales promelas</i>) LC50: >100mg/L (96h, <i>Pimephales promelas</i>) LC50: 19500 - 20700mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 18 - 20mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 13500 - 17600mg/L (96h, <i>Lepomis macrochirus</i>)	-	-
2-Pentanone, 4-methyl-	EC50: =400mg/L (96h, <i>Pseudokirchneriella subcapitata</i>)	LC50: 496 - 514mg/L (96h, <i>Pimephales promelas</i>)	-	EC50: =170mg/L (48h, <i>Daphnia magna</i>)
Ethyl acetate	-	LC50: 220 - 250mg/L (96h, <i>Pimephales promelas</i>) LC50: =484mg/L (96h, <i>Oncorhynchus mykiss</i>) LC50: 352 - 500mg/L (96h, <i>Oncorhynchus mykiss</i>)	-	EC50: =560mg/L (48h, <i>Daphnia magna</i>)
Solvent naphtha, petroleum, light aliphatic	EC50: =4700mg/L (72h, <i>Pseudokirchneriella subcapitata</i>)	-	-	-

Persistence and degradability No information available.**Bioaccumulation****Component Information**

Chemical name	Partition coefficient
Ethyl alcohol	-0.35
Methanol	-0.77

2-Pentanone, 4-methyl-	1.9
Ethyl acetate	0.73
Phenolphthalein	0.9

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

14. Transport information

DOT Regulated
UN number or ID number UN1170
Proper shipping name Ethanol solution
Transport hazard class(es) 3
Packing group II
DOT Marine Pollutant No

TDG Regulated
UN number or ID number UN1170
UN proper shipping name Ethanol solution
Transport hazard class(es) 3
Packing group II

ICAO (air) Regulated
UN number or ID number UN1170
UN proper shipping name Ethanol solution
Transport hazard class(es) 3
Packing group II

IATA Regulated
UN number or ID number UN1170
UN proper shipping name Ethanol solution
Transport hazard class(es) 3
Packing group II

IMDG Regulated
UN number or ID number UN1170
UN proper shipping name Ethanol solution
Transport hazard class(es) 3
Packing group II

15. Regulatory information

International Inventories

TSCA	Complies.
DSL/NDSL	Complies.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIC	Contact supplier for inventory compliance status.
NZIoC	Contact supplier for inventory compliance status.

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 and Evaluated Chemical Substances
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 %
Methanol 67-56-1	1.0
2-Pentanone, 4-methyl- 108-10-1	0.1
Phenolphthalein 77-09-8	0.1

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).

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)
Methanol	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
2-Pentanone, 4-methyl-	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Ethyl acetate	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Ethyl alcohol 64-17-5	Carcinogen Developmental
Methanol 67-56-1	Developmental
2-Pentanone, 4-methyl- 108-10-1	Carcinogen Developmental
Phenolphthalein 77-09-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethyl alcohol	X	X	X
Methanol	X	X	X
Water	-	-	X
2-Pentanone, 4-methyl-	X	X	X
Ethyl acetate	X	X	X
Phenolphthalein	X	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 3 Flammability 0 Instability 0 Special hazards -
HMIS Health hazards * 3 Flammability 0 Physical hazards 0 Personal protection X
*Chronic Hazard Star Legend * = Chronic Health Hazard*

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date

25-Sep-2023

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.

End of Safety Data Sheet