

SAFETY DATA SHEET

Preservative - Sorbic Acid +2 PF

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Trade Name: Preservative - Sorbic Acid +2 PF

Use of the Substance/Mixture: Preservative

Supplier of Safety Data Sheet: Wholesale Supplies Plus, Inc.
7820 E. Pleasant Valley Road
Independence, OH 44131
(800) 359-0944
www.wholesalesuppliesplus.com

In Case of Emergency: ChemTel
(800) 255-3924 US, Canada, PR and USVI
+(813) 248-0585 International

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Eye irritation: Category 2A

GHS Label Element

Hazard Pictograms:



Signal Word: Warning

Hazard Statements: Causes serious eye irritation.

Precautionary Statements: **Prevention:**
Wash skin thoroughly after handling. Wear eye protection/ face protection.
Response:
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/ attention.

Other hazards: None known

SECTION 3. COMPOSITION/INFORMATION ON

INGREDIENTS Substance / Mixture: Mixture

Hazardous Components

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Classification</u>	<u>Concentration (%)</u>
2-PHENOXYETHANOL	122-99-6	Acute Tox. 4; H302 Eye Irrit. 2A; H319	52.2582
1,2-OCTANEDIOL	1117-86-8	Eye Irrit. 2A; H319	41.7398
SORBIC ACID	110-44-1	Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335	6.002

SECTION 4. FIRST AID MEASURES

General advice: Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled: If breathed in, move person into fresh air.
If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use.

In case of eye contact: Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.

If swallowed: IF SWALLOWED: CALL A POISON CONTROL CENTER or physician if you feel unwell.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), pain in the abdomen and lower back acute kidney failure (sudden slowing or stopping of urine production) Causes serious eye irritation.

Notes to physician: No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO ₂) Dry chemical
Unsuitable extinguishing media	High volume water jet
Specific hazards during firefighting	If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release. Do not allow run-off from fire-fighting to enter drains or water courses.
Hazardous combustion products	Carbon dioxide and carbon monoxide
Specific extinguishing methods	Product is compatible with standard fire-fighting agents.
Further information	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Environmental precautions	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
Other information	Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	Do not breathe vapors/dust. Do not smoke. Container hazardous when empty. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection, see section 8. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards. Protect from frost.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters

Engineering measures Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Hand protection

Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection:

Wear as appropriate:

Impervious clothing

Safety shoes

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures:

Wash hands before breaks and at the end of the work day.

When using do not eat, drink or smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Light yellow
Odor:	No data available
Odor Threshold:	No data available
pH:	No data available
Melting point/freezing point:	No data available
Boiling point/boiling range:	No data available
Flash point:	255 °F / 124 °C
Evaporation rate:	No data available
Flammability (solid, gas):	No data available
Upper explosion limit:	No data available
Lower explosion limit:	No data available
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density	No data available
Density	1.014 - 1.024 g/cm ³
Solubility(ies)	
Water solubility	No data available
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	No data available
Thermal decomposition	No data available
Viscosity	
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Oxidizing properties	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Product will not undergo hazardous polymerization.
Conditions to avoid	Excessive heat Do not allow evaporation to dryness. Exposure to light.
Incompatible materials	Strong bases Strong oxidizing agents
Hazardous decomposition products	Carbon dioxide and carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Inhalation Skin contact Eye Contact Ingestion
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Acute toxicity

Not classified based on available information.

Components:

2-PHENOXYETHANOL:

Acute oral toxicity LD 50 (Rat): 1,850 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity Assessment: No adverse effect has been observed in acute inhalation toxicity tests.

1,2-OCTANEDIOL:

Acute oral toxicity LD 50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401

GLP: yes

Assessment: No adverse effect has been observed in acute oral toxicity tests.

Acute inhalation toxicity LC 50 (Rat): > 7.015 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Remarks: Information given is based on data obtained from similar substances.

SORBIC ACID:

Acute oral toxicity LD 50 (Rat): 7.36 g/kg

Acute inhalation toxicity LC 50 (Rat): > 38.1 mg/m³
Exposure time: 6 h
Test atmosphere: dust/mist

Acute dermal toxicity LD 50 (Rabbit): > 7,940 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Components:

2-PHENOXYETHANOL:

Species: Rabbit

Result: Not irritating to skin

1,2-OCTANEDIOL:

Species: Rabbit

Result: Not irritating to skin

SORBIC ACID:

Result: Irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapors may cause irritation to the eyes, respiratory system and the skin. Causes serious eye irritation.

Components:

2-PHENOXYETHANOL:

Species: Rabbit

Result: Irritating to eyes

1,2-OCTANEDIOL:

Result: Irritating to eyes

SORBIC ACID:

Species: Rabbit

Result: Irritating to eyes

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

2-PHENOXYETHANOL:

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

1,2-OCTANEDIOL:

Test Type: Local lymph node assay

Species: Mouse

Assessment: Did not cause sensitisation on laboratory animals.

Method: OECD Test Guideline 429

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

Germ cell mutagenicity

Not classified based on available information.

Components:

2-PHENOXYETHANOL:

Genotoxicity in vitro

Test Type: Ames test

Test species: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

1,2-OCTANEDIOL:

Genotoxicity in vitro

Test Type: Ames test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

GLP: yes

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

Components:

SORBIC ACID:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information**Product:**

Remarks: No data available

Carcinogenicity:**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION**Eco toxicity****Components:****2-PHENOXYETHANOL:**

Toxicity to fish

LC 50 (Fathead minnow (*Pimephales promelas*)): 337 - 352 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia
and other aquatic
invertebrates

EC50 (*Daphnia magna* (Water flea)): >500 mg/l

Exposure time: 48h

Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae

NOEC (*Desmodesmus subspicatus* (green algae)): > 500 mg/l

End point: Growth inhibition

Exposure time: 72h

Test Type: static test

Toxicity to fish
(Chronic toxicity)

NOEC (*Pimephales promelas* (fathead minnow)): 23 mg/l

Exposure time: 34 d

Test Type: flow-through test

Method: OECD Test Guideline 210

Toxicity to daphnia and Aquatic invertebrates (Chronic toxicity)	NOEC (Daphnia (water flea)): 9.43 mg/l Exposure time: 21 d End point: Reproduction Test Test Type: semi-static test Method: OECD Test Guideline 211
1,2-OCTANEDIOL: Toxicity to fish	LC 50 (Danio rerio (zebra fish)): > 2.2 - < 22.2 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and Other aquatic Invertebrates	EC 50 (Water flea (Daphnia magna)): 176 mg/l Exposure time: 48 h Test Type: semi-static test Method: OECD Test Guideline 202
Toxicity to algae	EC 50 (Pseudokirchneriella subcapitata (green algae)): 35 mg/l End point: Growth inhibition Exposure time: 72 h Method: OECD Test Guideline 201 GLP: yes
SORBIC ACID: Toxicity to fish	LC50 (Oryzias latipes (Orange-red killifish)): 75 mg/l Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and Other aquatic Invertebrates	EC50 (Daphnia magna (Water flea)): 70 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae	EbC50 (Desmodesmus subspicatus (green algae)): 24.1 mg/l End point: Biomass Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes
	ErC50 (Desmodesmus subspicatus (green algae)): 41.9 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes

Toxicity to daphnia and aquatic invertebrates (Chronic toxicity) NOEC (Water flea (Daphnia magna)): 50 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes

Persistence and degradability

Components:

2-PHENOXYETHANOL:

Biodegradability Result: Readily biodegradable
Biodegradation: 99 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

1,2-OCTANEDIOL:

Biodegradability Result: Readily biodegradable
Biodegradation: 75 %
Exposure time: 28 d
Method: OECD Test Guideline 301D
Remarks: Readily biodegradable

SORBIC ACID:

Biodegradability Result: Readily biodegradable
Biodegradation: 74.9 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Bio accumulative potential

Components:

2-PHENOXYETHANOL:

Partition coefficient: n-octanol/water log Pow: 1.16

1,2-OCTANEDIOL:

Partition coefficient: n-octanol/water log Pow: 1.0

SORBIC ACID:

Partition coefficient: n-octanol/water log Pow: 1.33
pH: 2.5

Mobility in Soil

Components

No data available

Other adverse effects

No data available

Product:

Additional ecological
Information

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

Components:**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

General advice

The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging

Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International transport regulations****REGULATION****MX_DG**

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

TDG_INWT_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - ROAD

Not dangerous goods

*** ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine Pollutant – NO

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION**SARA 311/312 HAZARDS:** Acute Health Hazard**SARA 313 Component(s)**

2-PHENOXYETHANOL	122-99-6	52.30%
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Pennsylvania Right to Know

2-PHENOXYETHANOL	122-99-6
1,2-OCTANEDIOL	1117-86-8
SORBIC ACID	110-44-1

New Jersey Right to Know

2-PHENOXYETHANOL	122-99-6
1,2-OCTANEDIOL	1117-86-8
SORBIC ACID	110-44-1

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth effects, or any other reproductive harm.

The components of this product are reported in the following inventories:

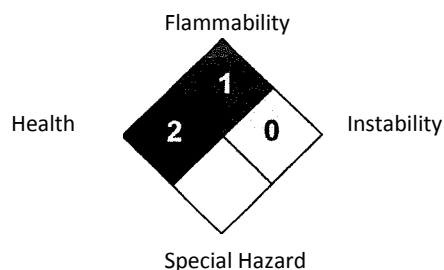
TSCA	On TSCA Inventory
DSL	All components of this product are on the Canadian DSL.
AICS	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECL	On the inventory, or in compliance with the inventory
PICCS	Not in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:

Health	2
Flammability	1
Physical Hazard	

0 = not significant, 1 = slight, 2 = moderate, 3 = high, 4 = extreme, * = chronic

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Sources of key data used to compile the Safety Data Sheet

The UNECE administers regional agreements implementing harmonized classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet:

ACGIH: American Conference of Industrial Hygienists
BEI: Biological Exposure Index
CAS: Chemical Abstracts Service (Division of the American Chemical Society).
CMR: Carcinogenic, Mutagenic or Toxic for Reproduction
FG: Food grade
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
H-statement: Hazard Statement
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization
ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"
IMDG: International Maritime Code for Dangerous Goods
ISO: International Organization for Standardization
logPow : octanol-water partition coefficient
LCxx : Lethal Concentration, for xx percent of test population
LDxx : Lethal Dose, for xx percent of test population.
ICxx : Inhibitory Concentration for xx of a substance
Ecxx : Effective Concentration of xx
N.O.S.: Not Otherwise Specified
OECD : Organization for Economic Co-operation and Development
OEL : Occupational Exposure Limit
P-Statement: Precautionary Statement
PBT: Persistent, Bioaccumulative and Toxic
PPE: Personal Protective Equipment
STEL: Short-term exposure limit
STOT: Specific Target Organ Toxicity
TLV: Threshold Limit Value
TWA: Time-weighted average
vPvB: Very Persistent and Very Bioaccumulative
WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
DOT: Department of Transportation
FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act
HMIRC: Hazardous Materials Information Review Commission
HMIS: Hazardous Materials Identification System
NFPA: National Fire Protection Association
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PMRA: Health Canada Pest Management Regulatory Agency
RTK: Right to Know
WHMIS: Workplace Hazardous Materials Information System