

MATERIAL SAFETY DATA SHEET

DATE PREPARED: 01/23/1998
MSDS No:

1. Chemical Product And Company Identification

Product Name: "EASTMAN" Potassium Sorbate, Granular, Kosher

Product Identification Number(s): 19859

Manufacturer/Supplier: Eastman Chemical Company, Kingsport, Tennessee 37662

MSDS Prepared by: Eastman Product Safety and Stewardship, Eastman Chemical Company, Kingsport, TN 37662

For Emergency Health, Safety & Environmental Information: call 800-EASTMAN

For Emergency Transportation Information: call CHEMTREC at 800-424-9300 or call 800-EASTMAN

For Other Information: call your Eastman representative or the Eastman operator at 423-229-2000 (USA)

Chemical Name: 2, 4-heasadienoic acid, potassium salt

Synonym(s): EAN 042182; PM 13373-00; PM 13374-00

Molecular Formula: C₆H₇KO₂

Molecular Weight: 150.22

Product Use: Food Additive

2. Composition/Information On Ingredients

Weight % - Component - (CAS Registry Number)

100 Potassium sorbate (024634-61-5)

3. Hazards Identification

CAUTION!

POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES

HMIS Hazard Ratings: Health - 1, Flammability -1, Chemical Reactivity - 0

NFPA Hazard Ratings: Health - 1, Flammability -1, Instability - 0

NOTE: HMIS and NFPA ratings involve data and interpretations that may vary from company to company. they are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

4. First-Aid Measures

Inhalation: If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Eyes: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin: Wash with soap and water. Remove contaminated clothing and shoes. If skin irritation or an allergic skin reaction develops, get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

5. Fire Fighting Measures

Extinguishing Media: Water spray, dry chemical.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide.

Unusual Fire and Explosion Hazards: Powdered material may form explosive dust-air mixtures.

6. Accidental Release Measures

Sweep or scoop up and remove.

7. Handling And Storage

Personal Precautionary Measures: Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Minimize dust generation and accumulation. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Storage: Keep container closed. This material may be used in food. Protect from contamination. Do not store or ship together with odorous substances, toxic substances.

8. Exposure Controls/Personal Protection

Exposure Limits:

ACGIH Threshold Limit Value (TLV): Not established

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards): Not established

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

Respiratory Protection: None should be needed

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.

Skin Protection: For operations where prolonged or repeated skin contact may occur, chemical-resistant gloves should be worn. Contact glove manufacturer for specific information.

Recommended Decontamination Facilities: Eye bath, washing facilities.

9. Physical and Chemical Properties

- **Physical Form:** solid

- **Color:** white; off-white

- **Odor:** odorless

- **Odor Threshold:** not applicable

- **Specific Gravity (water = 1):** 1.36

- **Vapor Pressure:** negligible

- **Vapor Density (Air = 1):** not applicable

- **Evaporation Rate:** not applicable

- **Boiling Point:** not available
 - **Melts with Decomposition:** 270 C (518 F)
 - **Viscosity at Ambient Temperature:** not available
 - **Solubility in Water at 20 C (68 F):** appreciable
 - **pH:** 8.0 (at 0.3 g/l water)
 - **Octanol/Water Partition Coefficient:** not available
 - **Flash Point:** not applicable, combustible solid
 - **Lower Explosive Limit:** not applicable
 - **Upper Explosive Limit:** not applicable
 - **Autoignition Temperature:** not available
 - **Sensitivity to mechanical Impact:** insensitive
 - **Sensitivity to Static Discharge:** Material is unlikely to accumulate a static charge which could act as an ignition source.
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10. Stability And Reactivity

Stability: Stable

Incompatibility: Material can react with strong oxidizing agents

Hazardous Polymerization: Will not occur

11. Toxicological Information

Effects of Exposure:

Inhalation: Low hazard for usual industrial handling or commercial handling by trained personnel.

Eyes: May cause transient irritation.

Skin: Prolonged or repeated contact may cause irritation.

Ingestion: Expected to be a low ingestion hazard.

Acute Toxicity Data:

Oral LD-50 (rat): 6650 mg/kg
Inhalation LC-50: Not available
Dermal LD-50 (rabbit): >7940 mg/kg
Skin irritation (rabbit): slight
Repeated skin application (human): slight to moderate irritation
Eye Irritation (rabbit): slight

Definitions for the following section(s):

LOEL = Lowest-observed-effect level

NOAEL = No observed-adverse-effect level

NOEL = No-observed-effect level

Subchronic Toxicity Data:

Oral Study (3months, rat): LOEL = 5 % in diet (target organ effects: kidney), NOEL = 2 % in diet

Oral Study (3 months, dog): NOEL = 2 % in diet (highest dose tested)

Reproductive Toxicity Data:

Oral Study (rat): NOEL for teratogenicity = 340 mg/kg/day (highest dose tested)

Oral Study (mouse): NOEL for teratogenicity = 460 mg/kg/day (highest dose tested)

Mutagenicity/Genotoxicity Data:

Salmonella typhimurium assay (Ames test): Negative (+/- activation)

Mitotic recombination (Saccharomyces cerevisiae) assay: Negative (+/- activation)

12. Ecological Information

Introduction: This environmental effects summary is written to assist in addressing emergencies created by an accidental spill which might occur during the shipment of this material, and, in general, it is not meant to address discharges to sanitary sewers or publicly owned treatment works.

Summary: Data for this material have been used to estimate its environmental impact. It has the following properties: a low potential to affect aquatic organisms, a low potential to affect algal growth. when diluted with a large amount of water, this material released directly or indirectly into the environment is not expected to have a significant impact.

Definitions for the following section(s): NOEC = No-observed-effect concentration, LOEC = lowest-observed-effect concentration, MATC = maximum acceptable toxicant concentration.

Acute Algal Effects Data:

24-h EC-50 (Selenastrum capricornutum): >560 mg/L

48-h EC-50 (Selenastrum capricornutum): >560 mg/L

72-h EC-50 (Selenastrum capricornutum): 320 - 560 mg/L

96-h EC-50 (Selenastrum capricornutum): 441 mg/L

96-h EC-50 (Selenastrum capricornutum): 464 mg/L

Acute Aquatic Effects Data:

96-h LC-50 (fathead minnow): 900 mg/L; NOEC: 490 mg/L

96-h LC-50 (rainbow trout): 1100 mg/L; NOEC: 560 mg/L

48-h LC-50 (daphnid): 1700 mg/L; NOEC: 1000 mg/L

13. Disposal Considerations

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate.

14. Transport Information

DOT (USA) Status: not regulated

Air - International Civil Aviation Organization (ICAO), ICAO Status: not regulated

Sea - International Maritime Dangerous Goods (IMDG), IMDG Status: not regulated

15. Regulatory Information

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

OSHA Classification: Nonhazardous

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause cancer: none

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause adverse reproductive effects: none

This document has been prepared in accordance with the MSDS requirements of the WHMIS Controlled Products Regulation. WHMIS (Canada) Status: Not applicable (exemption)

Carcinogenicity Classification (components present at 0.1% or more): International Agency for Research on Cancer (IARC): Not listed

American Conference of Governmental Industrial Hygienists (ACGIH): Not listed

National Toxicology Program (NTP): Not listed

Occupational Safety and Health Administration (OSHA): Not listed

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and reauthorization Act (SARA) of 1986 and 40 CFR Part 372: None

SARA (U.S.A.) Sections 311 and 312 hazard classification(s): Not applicable

US Toxic Substances Control Act (TSCA): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

Canadian Environmental Protection Act (CEPA) and Domestic Substances List (DSL): This product is listed on the DSL or otherwise complies with CEPA new substance notification requirements.

European Inventory of Existing Commercial Chemical Substances (EINECS): This product is listed on EINECS. EINECS Number: 2463761

Australian Inventory of Chemical Substances (AICS) and National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

Japanese Handbook of Existing and New Chemical Substances: This product is listed in the Handbook or has been approved in Japan by new substance notification.

FDA: This product is permitted under existing FDA regulations for use as a food ingredient. Generally Recognized as Safe (GRAS). Applicable FDA regulations: 21 CFR 182.3640

Other Information

Label Statements:

CAUTION!

POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES

Minimize dust generation and accumulation.

Meets Food Chemicals Codex Specification. This material may be used in food. Protect from contamination. Do not store or ship together with odorous substances, toxic substances.

CAUTION: FOR MANUFACTURING, PROCESSING OR REPACKING BY TRAINED PERSONNEL.

-----NOTICE-----

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