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Preserving with Competence

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT and COMPANY IDENTIFICATION

GENERAL USE: Food Additive

COMMON NAME: Potassium Sorbate, 2,4-Hexadienoic acid, Potassium Salt COUNTRY/COUNTRIES: U.S.A.

DISTRIBUTED BY:

EMERGENCY TELEPHONE NUMBER:

Nutrinova Inc. 1601 W LBJ Freeway

Dallas, TX 75234

Product Information: 1-800-786-3883

1-800-424-9300 (CHEMTREC)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: White crystalline powder with no odor.

WARNING. Causes eye irritation. May cause skin irritation

POTENTIAL HEALTH EFFECTS: See Section 11 for more information.

LIKELY ROUTES OF EXPOSURE: eye and skin contact, inhalation

INHALATION: Potassium sorbate is not known to cause respiratory irritation.

EYE CONTACT: Potassium sorbate causes eye irritation.

SKIN CONTACT: Potassium sorbate may cause skin irritation.

INGESTION: Not harmful – an FDA approved food additive.

CHRONIC: No known effects.

TARGET ORGANS: eyes, skin

CARCINOGENICITY: This substance not is listed by NTP, OSHA, or IARC as a carcinogen.

POTENTIAL ENVIRONMENTAL EFFECTS: See Section 12 for more information.

Not toxic to aquatic organisms.



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3. COMPOSITION, INFORMATION ON INGREDIENTS

Product contains the following hazardous ingredient:

COMPONENT CAS No. %

2,4-Hexadienoic acid, potassium salt, (2E,4E)- 24634-61-5 100

4. EMERGENCY AND FIRST AID MEASURES

INHALATION: Move to fresh air. Get medical attention if symptoms occur.

SKIN CONTACT: Remove contaminated clothing and wash before reuse. Wash skin with soap and water.

EYE CONTACT: Immediately flush eyes with water for at least 15 minutes. Get medical attention.

INGESTION: Do NOT induce vomiting. Do NOT administer anything by mouth to an unconscious person. Get medical attention.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, water spray, foam or dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing.

UNUSUAL FIRE and EXPLOSION HAZARDS: Dust-air mixtures may ignite or explode. HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and potassium.

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill. Place spill in a chemical waste container.

SPECIFIC: Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Dike spill. Sweep up material and dispose as waste following local regulations. Scrub contaminated area with detergent and water.



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7. HANDLING and STORAGE

HANDLING: Take precautionary measures against electrostatic loading. Avoid contact with skin and eyes. Avoid prolonged or repeated breathing of dust. Wash thoroughly after handling.

STORAGE: Keep away from sources of ignition. Store in a cool, dry place protected from light. Keep container tightly closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

COMPONENT	OSHA: TWA	ACGIH: TWA/STEL
Potassium sorbate	None established	None established

ENGINEERING CONTROLS: Control the airborne concentrations below the exposure limits. Use only with adequate ventilation.

PERSONAL PROTECTION:

RESPIRATORY: Use only with adequate ventilation.

SKIN PROTECTION: Use of protective gloves is required.

EYE PROTECTION: Avoid contact with eyes.

OTHER: Avoid all skin, eye and clothing contact with the product. Promptly change affected

clothing.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: white crystalline powder ODOR: none

VAPOR PRESSURE @ 20°C: not determined MELTING POINT: 210°C (decomposition)

DENSITY @ 20°C: 1.36g/cm³ BOILING POINT: not determined

BULK DENSITY: 0.27 g/cm³ SELF-IGNITING: >150°C (wire basket)

SOLUBILITY in water @ 20°C : 58 weight % FLASH POINT: not applicable

pH (1.6g/l) @ 20°C: 8-11 PARTITION COEFFICIENT: -1.72log POW



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10. STABILITY and REACTIVITY

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not

occur.

INCOMPATIBILITY: Avoid contact with oxidizing agents.

HAZARDOUS THERMAL DECOMPOSITION PRODUCTS: Thermal decomposition will produce

oxides of carbon and potassium.

11. TOXICOLOGICAL INFORMATION

EYE: Potassium sorbate is an irritant in rabbit eyes.

SKIN: Acute dermal toxicity LD_{50} (rat) > 2,000 mg/kg (sorbic acid); may cause irritation in

humans.

INGESTION: Acute oral toxicity LD_{50} (rat) > 2,000 mg/kg.

INHALATION: Potassium sorbate is not known to irritate the respiratory tract.

MUTAGENICITY: Potassium sorbate is not mutagenic in several in-vitro and in-vivo

tests (sorbic acid).

SENSITIZATION: No effects known.

CARCINOGENICITY: For sorbic acid, no indications of carcinogenic effects are available

from long-term trials in rats.

12. ECOLOGICAL INFORMATION

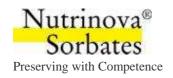
BIODEGRADABILITY: Readily degradable (sorbic acid).

FISH TOXICITY: LC₅₀ 96 hr (Brachidanio rerio) = 1250 mg/l

DAPHNIA MAGMA TOXICITY: EC_{50} 48 hr = 750 mg/l

ALGAE TOXICITY: EC_{50} 72 hr (Scenedesmus subspicatus) = 24.1 mg/l (sorbic acid)

BACTERIA TOXICITY: EC_{50} 3 hr (Bak) = >100 mg/l (sorbic acid)



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13. DISPOSAL CONSIDERATIONS

Treatment, storage, transportation and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

14. TRANSPORT INFORMATION (not meant to be all inclusive)

D.O.T.: Not regulated

15. REGULATORY INFORMATION (not meant to be all inclusive)

UNITED STATES

Potassium sorbate is listed on the TSCA Inventory.

Potassium sorbate is regulated by the Food, Drugs and Cosmetics Act, GRAS status (21CFR§182.3640).

This Material Safety Data Sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard.

Health Hazards: Irritant – eyes, skin

SARA Hazard Class: Acute: Yes

Fire Hazard: No Pressure: No

Chronic: No

Reactivity: No.

16. OTHER INFORMATION

MSDS STATUS: Written January 25, 2007

DISCLAIMER AND LIMITATION OF LIABILITY

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