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SC13322



MAGNESIUM SULFATE

Material Safety Data Sheet

Mallinckrodt Inc.
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Emergency Telephone Number
314-982-5000

Effective Date: 11-07-85

PRODUCT IDENTIFICATION:

Synonyms: Magnesium sulfate (1:1) heptahydrate; Epsom salts; sulfuric acid, magnesium salt (1:1), heptahydrate

Formula CAS No.: 10034-99-8 (Hydrated)
TSCA CAS No.: 7487-88-9 (Anhydrous)

Molecular Weight: 246.47

Hazardous Ingredients:
Not applicable.

Chemical Formula: $MgSO_4 \cdot 7H_2O$

PRECAUTIONARY MEASURES

WARNING! MAY BE HARMFUL IF SWALLOWED.

Wash thoroughly after handling.

EMERGENCY/FIRST AID

If swallowed, give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

SEE SECTION 5.

DOT Hazard Class: Not Regulated

Physical Data

SECTION 1

Appearance: Transparent crystals, or white powder.

Odor: Odorless.

Solubility: Very soluble in water.

Boiling Point: Not applicable.

Vapor Density (Air=1): No information found.

Melting Point: Loses water @ 250°C (482°F)
Decomposes @ 1124°C (2053°F)

Vapor Pressure (mm Hg): No information found.

Specific Gravity: 1.67

Evaporation Rate: No information found.

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SECTION 2

Fire and Explosion Information

Fire: Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

Reactivity Data

SECTION 3

Stability:

Stable under ordinary conditions of use and storage. Loses some moisture on exposure to dry air at room temperatures.

Hazardous Decomposition Products:

Oxides of sulfur and the contained metal.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

No incompatibility data found.

Leak/Spill Disposal Information

SECTION 4

Clean-up personnel may require respiratory protection from dust. Spills: Sweep up and containerize for reclamation or disposal. Avoid dust dispersal. Trace residue may be flushed to sewer with large amounts of water. Disposal: Whatever cannot be saved for reclamation may be disposed in an approved waste disposal facility.

Ensure compliance with local, state and federal regulation.

Health Hazard Information

SECTION 5

A. Exposure/Health Effects

Inhalation:

Dust may be slightly irritating. Sore throat or coughing may occur.

Ingestion:

Abdominal pain, vomiting and diarrhea may occur.

Skin Contact:

May cause minor irritation.

Eye Contact:

May cause redness and pain.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

No information found.

B. FIRST AID

Inhalation:

Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion:

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Skin Exposure:

Remove any contaminated clothing. Wash skin with plenty of water for at least 15 minutes. If irritation develops, get medical attention.

Eye Exposure:

Wash eyes with plenty of water for at least 15 minutes. If irritation develops, get medical attention.

C. TOXICITY DATA

(ATECS, 1982)

No LD50/LC50 information found relating to normal routes of occupational exposure. Mutation references cited for anhydrous salt. Animal reproductive effects cited for anhydrous salt.

Occupational Control Measures

SECTION 6

Airborne Exposure Limits:

None established.

Ventilation System:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Personal Respirators (NIOSH Approved)

For conditions of use where exposure to the dust is apparent, a dust/mist respirator may be worn. For emergencies, a self-contained breathing apparatus may be necessary.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

Storage and Special Information

SECTION 7

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

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