

# **Material Safety Data Sheet**

12601 Twinbrook Parkway, Rockville, MD 20852 USA Phone Calls: 301-816-8129 8 a.m. to 5 p.m. EST Mon. - Fri.

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#### **MAGALDRATE**

Catalog Number: 1374000 Revision Date: February 12, 2010

## **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Common Name: Magaldrate

Manufacturer: U. S. Pharmacopeia

Responsible Party: Reference Standards Technical Services

Mailing Address: 12601 Twinbrook Parkway, Rockville, MD 20852 USA

Phone: 301-816-8129

Hours: 8 a.m. to 5 p.m. EST Mon. - Fri.

Product Use: USP Reference Standards and Authentic Substances are used for chemical tests and assays in analytical,

clinical, pharmaceutical, and research laboratories.

## **SECTION 2 - HAZARD INFORMATION**

Adverse Effects: Adverse effects may include blood in stool, bone or joint aches and pains, confusion or irritability, headache, loss of

appetite, nausea, vomiting, and unusual weakness or tiredness. Possible allergic reaction to material if inhaled,

ingested, or in contact with skin.

Overdose Effects: Overdose effects include possible diarrhea or laxative effect, loss of appetite, unusual tiredness or weakness,

continuing feeling of discomfort, muscle weakness, unusual weight loss, dizziness or lightheadedness, irregular

heartbeat, and mood or mental changes.

Acute: Possible eye, skin, gastrointestinal, and/or respiratory tract irritation.

**Chronic:** Possible hypersensitization and electrolyte balance.

Medical Conditions Aggravated by Exposure: Hypersensitivity to the material, intestinal obstruction, and severe kidney function

impairment.

Cross Sensitivity: Persons sensitive to aluminum or magnesium may be sensitive to this material also.

Target Organs: n/f

For additional information on toxicity, see Section 11.

#### SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Common Name: Magaldrate

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Formula: Al5Mg10(OH)31(SO4)2. xH2O

**Synonym:** n/f

Chemical Name: Aluminum magnesium hydroxide sulfate, hydrate

CAS: 74978-16-8

RTECS Number: n/f

Chemical Family: n/f

Therapeutic Category: Antacid Composition: Pure Material

## **SECTION 4 - FIRST AID MEASURES**

**Inhalation:** May cause irritation. Remove to fresh air.

**Eye:** May cause irritation. Flush with copious quantities of water. **Skin:** May cause irritation. Flush with copious quantities of water.

**Ingestion:** May cause irritation or chalky taste. Flush out mouth with water.

General First Aid Procedures: Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an

occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical

attention.

Note to Physicians

Overdose Treatment: n/f

#### **SECTION 5 - FIREFIGHTING MEASURES**

Extinguisher Media: Water spray, dry chemical, carbon dioxide, or foam as appropriate for surrounding fire and materials.

Fire and Explosion Hazards: This material is assumed to be combustible. As with all dry powders, it is advisable to ground mechanical

equipment in contact with dry material to dissipate the potential buildup of static electricity.

**Firefighting Procedures:** As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing

equipment and protective clothing.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Spill Response:** Wear approved respiratory protection, chemically compatible gloves, and protective clothing. Wipe up spillage or

collect spillage using a high-efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately labeled

container for disposal. Wash spill site.

## **SECTION 7 - HANDLING AND STORAGE**

**Handling:** As a general rule, when handling USP Reference Standards, avoid all contact and inhalation of dust, mists, and/or vapors

associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing

gloves, wash hands and other exposed skin thoroughly.

**Storage:** Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure

product integrity.

#### SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls: Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation,

local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general

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> exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials.

Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for grinding, crushing, weighing, or other dust-generating procedures.

Respiratory Protection: Where respirators are deemed necessary to reduce or control occupational exposures, use NIOSH-approved respiratory protection and have an effective respirator program in place (applicable U.S. regulation OSHA 29 CFR 1910.134).

Gloves:

Chemically compatible. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.

Eye Protection: Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area.

Protective Clothing: For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination.

Exposure Limits: n/f

#### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Properties as indicated on the MSDS are general and not necessarily specific to the USP Reference Standard Lot provided.

**Appearance and Odor:** White crystalline powder; odorless.

Odor Threshold: n/f

**pH:** 8.5

Melting Range: n/f **Boiling Point:** n/f Flash Point: n/f

Autoignition Temperature: n/f

Evaporation Rate: n/f

**Upper Flammability Limit:** n/f Lower Flammability Limit: n/f

Vapor Pressure: n/f Vapor Density: n/f Specific Gravity: 1.0

**Solubility in Water:** Insoluble

Fat Solubility: n/f

Other Solubility: Insoluble in ethanol; soluble in dilute solutions of mineral acids.

Partition Coefficient: n-octanol/water: n/f

Percent Volatile: n/f Reactivity in Water: n/f **Explosive Properties:** n/f Oxidizing Properties: n/f

Formula: Al5Mg10(OH)31(SO4)2 . xH2O

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Molecular Weight: 1097.3 (anhydrous)

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#### **SECTION 10 - STABILITY AND REACTIVITY**

**Conditions to Avoid:** Avoid exposure to heat.

**Incompatibilities:** May react with mineral acids, maleic anhydride, and phosphorus.

**Decomposition Products:** When heated to decomposition, material emits toxic fumes. Emits toxic fumes under fire conditions.

Stable? Yes **Hazardous Polymerization?** No

## **SECTION 11 - TOXICOLOGICAL PROPERTIES**

Oral Rat: n/f

Oral Mouse: n/f

Other Toxicity Data: n/f

**Irritancy Data:** n/f Corrosivity: n/f

Sensitization Data: n/f

IARC: No OSHA: No Listed as a Carcinogen by: NTP: No

Other Carcinogenicity Data: No

**Mutagenicity Data:** n/f

Reproductive and Developmental Effects: Antacids containing aluminum and magnesium are generally considered safe for therapeutic use during pregnancy, as long as chronic high doses are avoided. Problems such as mineral imbalance and increased tendon reflexes in fetuses and newborns whose

mothers were chronic users of high doses of antacids have been reported.

#### **SECTION 12 - ECOLOGICAL INFORMATION**

**Ecological Information:** n/f

## **SECTION 13 - DISPOSAL CONSIDERATIONS**

**Disposal:** Dispose of waste in accordance with all applicable Federal, State, and local laws.

## **SECTION 14 - TRANSPORT INFORMATION**

**Shipping Name:** n/f

Class: n/f

UN Number: n/f

**Packing Group:** n/f

Additional Transport Information: n/f

## **SECTION 15 - REGULATORY INFORMATION**

**U.S. Regulatory Information:** n/f

**International Regulatory Information:** n/f

## **SECTION 16 - OTHER INFORMATION**

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