

F017

MSDS Number: **B1015** * * * * * Effective Date: 11/15/06

MSDS **Material Safety Data Sheet**

From: Mallinckrodt Inc.
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St. Louis, MO 63042



24 Hour Emergency Telephone: 314-654-1600
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. And Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

HD 200® PLUS

cat. No. 1520
Qty: 2 312 gm
NDC 0224-0128-12

1. Product Identification

Synonyms: Barium Sulfate 98% w/w for Suspension
CAS No.: 7727-43-7
Molecular Weight: 233.39
Chemical Formula: BaSO4
Product Codes: 149311

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Barium Sulfate	7727-43-7	97.8%	Yes
Inactive ingredients	N/A	2.2%	No
Inactive ingredients: Suspending agents, Simethicone, Artificial flavor and sweetener			

3. Hazards Identification

Emergency Overview

CAUTION! ASPIRATION MAY CAUSE LUNG DAMAGE. As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Potential Health Effects

Inhalation:

Not expected to be a health hazard.

Ingestion:

Aspiration into the lungs may occur during swallowing or vomiting, resulting in lung damage. The most frequently reported side effects from therapeutic doses are gastrointestinal effects including constipation, cramping, nausea and diarrhea.

Skin Contact:

May cause irritation. May cause allergic skin reactions.

Eye Contact:

No adverse effects expected but dust may cause mechanical irritation.

Chronic Exposure:

Long term inhalation of dust may lead to deposition in lungs in sufficient quantities to produce baritosis - a benign pneumoconiosis. This produces a radiological picture even though symptoms and abnormal signs may not be present.

Aggravation of Pre-existing Conditions:

Respiratory system disease, gastrointestinal disorders.

4. First Aid Measures

Inhalation:

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

Ingestion:

Material poses an aspiration hazard. If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

Skin Contact:

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eye Contact:

Wash thoroughly with running water. Get medical advice if irritation develops.

5. Fire Fighting Measures

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:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Store at controlled room temperature 15-30C (59-86F). Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

For Barium sulfate: -OSHA Permissible Exposure Limit (PEL):

15 mg/m³ total dust, 5 mg/m³ respirable dust

-ACGIH Threshold Limit Value (TLV):

10 mg/m³ (TWA)

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):

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Fine, white powder.

Odor:

Mild, fruity odor.

Solubility:

Insoluble in water.

Specific Gravity:

4.5 @ 15 (59F)

pH:

5% in water is neutral to litmus.

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

1600C (2912F) Decomposes.

Melting Point:

1580C (2876F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Burning may produce sulfur oxides.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Aluminum, phosphorus.

Conditions to Avoid:

Dusting and incompatibles.

11. Toxicological Information

No LD50/LC50 information found relating to normal routes of occupational exposure.

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-----\Cancer Lists\-----
Ingredient                                     ---NTP Carcinogen---
Known      Anticipated      IARC Category
-----
Barium Sulfate (7727-43-7)                     No           No           None
Inactive ingredients                           No           No           None
    
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12. Ecological Information

Environmental Fate:

This material may bioaccumulate to some extent.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated.

15. Regulatory Information

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-----\Chemical Inventory Status - Part 1\-----
Ingredient                                     TSCA  EC    Japan  Australia
-----
Barium Sulfate (7727-43-7)                     Yes   Yes   Yes     Yes
Inactive ingredients                           Yes   Yes   Yes     Yes
    
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-----\Chemical Inventory Status - Part 2\-----
Ingredient                                     Korea  --Canada--  Phil.
Korea  DSL  NDSL
-----
Barium Sulfate (7727-43-7)                     Yes   Yes   No     Yes
Inactive ingredients                           Yes   Yes   No     Yes
    
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-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Barium Sulfate (7727-43-7)	No	No	No	No
Inactive ingredients	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8 (d)
Barium Sulfate (7727-43-7)	No	No	No
Inactive ingredients	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
 SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
 Reactivity: No (Mixture / Solid)

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: 0 Flammability: 0 Reactivity: 0

Label Hazard Warning:

CAUTION! ASPIRATION MAY CAUSE LUNG DAMAGE. As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

Keep container closed.
 Do not get in eyes, on skin, or on clothing.
 Wash thoroughly after handling.

Label First Aid:

If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.

Product Use:

Contrast media.

Revision Information:

New MSDS.

Disclaimer:

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