

respiration and get medical attention immediately. Keep person warm and at rest. Treat symptomatically and supportively.

Emergency Eye Wash : When there is a possibility that an employees eyes may be exposed to bulk quantities or high concentrations of airborne dust of this substance, the employer should provide an eye wash fountain within the immediate work area for emergency.

5. FIRE FIGHTING MEASURES

Extinguishing Media:

Not readily combustible. Select extinguishing agent appropriate to other materials involved.

Special Hazards of Product:

Avoid the formation of dust clouds

Protective Equipment for Fire-fighting:

No specific measures necessary

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures No specific measures necessary

7. HANDLING AND STORAGE

Handling:

Wash thoroughly after handling.

Storage:

Store in original containers. Storage area should be away from incompatible materials and in cool, dry, well-ventilated and protected areas

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

United States

Exposure Limits

ACGIH TLV (United States, 01/2005)

TWA: 10mg/cu.m (8 hours). Form: All forms.

NIOSH REL (United States ,12/2001)

TWA: 5 mg/cu.m (10 hours). Form: Respirable fraction.

TWA: 10mg/cu.m (10 hours). Form: Total

OSHA PEL (United States, 08/1997)

TWA: 0, 5 mg/cu.m (8 hours). Form: All forms.

TWA: 5 mg/cu.m (8 hours). Form: Respirable fraction

TWA: 15mg/cu.m (8 hours). Form: Total dust.

Canada

ACGIH TLV (United States, 01/2005)

TWA: 10mg/cu.m (8 hours). Form: All forms.

Mexico

NOM-010-STPS (Mexico, 09/2000)

CPT: 0,5 mg/cu.m (8 hours). Form: All forms.

Occupational Exposure Standards:

OSHA TWA(respirable dust)-5 mg/m³; ACGIH, OSHA TWA(total dust)-10 mg/m³

Engineering Control Measures:

Engineering methods to prevent or control exposure are preferred. If they are not effective, then suitable personal protective should be used.

Respiratory Protection:

The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Hand Protection:

Protective gloves are not required, but may be worn to prevent skin dryness or irritation.

Eye Protection:

Dust tight goggles

Body Protection:

Normal work wear

Emergency Eye Wash:

When there is a possibility that an employees eyes may be exposed to bulk quantities or high concentrations of airborne dust of this substance, the employer should provide an eye wash fountain within the immediate work area for emergency.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Solid (Powder.)
Odor	: Odorless.
Color:	: White to Tan.
Melting/freezing point	: 1580 deg. C (2876 deg F)
Solubility in water	: Insoluble in Water
Relative density	: 4.2 to 4.5 (Water=1)
MOHS Hardness	: 2.5-3.5

10. STABILITY AND REACTIVITY

Stability : Product is stable.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity : Tumorigenic data(RTECS), Mutagenic data(RTECS)

Chronic Toxicity/Carcinogenicity:

Inhaled fine dusts of barium sulfate form harmless nodular granules in the lung(baritosis).Baritosis produces no symptoms of bronchitis or emphysema.Lung functioning is not affected, although some patients complain of dyspnea upon exertion.

Genotoxicity: None

Reproductive/Developmental Toxicity: None

12. ECOLOGICAL INFORMATION

Mobility : The product is insoluble in water

Persistence/Degradability : No relevant studies identified

Bioaccumulation : No relevant studies identified

Ecotoxicity data : Species (Daphnia magna, EC50), Period (48 hrs), Result (32 mg/l)

13. DISPOSAL

Product Disposal : Dispose of in accordance with all applicable local, state, and federal regulations.

Container Disposal : Dispose of containers with care

14. TRANSPORT INFORMATION

NAERG: Not applicable.

Regulatory information: Not regulated by UN/, IMDG/IATA, DOT/TDG

15. REGULATORY INFORMATION

United States

HCS Classification: Target organ effects.

US Federal regulations:

TSCA 8(b) inventory: All components listed.

SARA 302/304/311/312 extremely hazardous substances: no products found.

SARA 302/304 emergency planning and notification: no products found.

SARA 302/304/311/312 hazardous chemicals: Barium sulfate.

SARA 311/312/ MSDS distribution: chemical inventory- hazard identification: Barium sulfate: immediate (acute) health hazard.

Clean Water Act (CWA) 307: No products found.

Clean Water Act (CWA) 311: No products found.

Clean Air Act (CAA) 112 accidental release prevention: no products found.

Clean Air Act (CAA) 112 regulated flammable substances: no products found.

Clean Air Act (CAA) 112 regulated toxic substances: no products found.

Pennsylvania RTK: Barium Sulfate: (environmental hazard, generic environmental hazard)

Massachusetts RTK: Barium sulfate

New Jersey: Barium Sulfate

State regulations:

California prop. 65: No products were found.

Canada : Not controlled under WHMIS.

This MSDS contains all the information required by the Canadian CPR, the United States OSHA, and the American National Standard Institute (ANSI) Z400.1 and Mexican NOM-018-STPS-2000.

Mexico Classification: Health(1), Flammability (0), Reactivity (0)
Hazard Ratings: 4 (extreme), 3(serious), 2(moderate), 1(slight), 0(minimal)

International lists:

This product and its ingredients are listed on national inventories, or is exempted from being listed, Australia (AICS), in Europe (EINECS/ELINC), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969)

16. OTHER INFORMATION\CONTACT

Hazardous Material Information System (HMIS) USA:

Health Hazard-1(slight), Flammability Hazard-0 minimal, Reactivity Hazard-0 minimal, Personal protection-E glasses, gloves dust respirator

National Fire Protection Association (USA):

Health (1), Fire Hazard (1), Physical Hazard (0), Personal Protection (E)

The information contained herein is based on data available to CIMBAR Performance Minerals and is believed to be correct. However, CIMBAR Performance Minerals makes no warranty, expressed or implied, regarding the accuracy or completeness of this information or the results to be obtained from the use thereof.

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