MSDS

MATERIAL SAFETY DATA SHEET

Trade Name: Hollow Glass Microspheres

Date Prepared: **07/22/09**

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Hollow Glass Microspheres
Manufacturer: Sinosteel Maanshan Institute of Mining Research Co .,Ltd.
666 Xitang Road, Maanshan city,Anhui Province,China,243000
Phone number: 0086-555-2404841
Fax number: 0086-555-2309449
EMERGENCY PHONE: 0086-555-2404841 (24 hours)
Intended Use: Lightweight Filler

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	C.A.S.No.	Percent
Soda Lime Borosilicate Glass	65997-17-3	97 -100%

3. HAZARDS IDENTIFICATION

3 .1 EMERGENCY OVERVIEW

WARNING! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY AFFECT LUNGS.
Specific Physical Form: Low density fine powder (< 130 microns)
Color ,Odor: White, Odorless
General Physical Form: Solid

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact: May cause mild irritation, pain, redness, tearing and corneal abrasion..
Skin Contact: May cause mild irritation ,redness and itching.
Inhalation: May cause mild irritation to the respiratory tract,sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
Ingestion: Not expected to be a health hazard via ingestion.
Aggravation of Pre-existing Conditions: Persons with pre-existing lung disease may be more

susceptible to the effects of this substance.

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

Skin Contact: Wash affected area with soap and water. If signs/symptoms develop, get medical attention.

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

Ingestion: Not expected to require first aid measures. If large amounts were swallowed, give water to drink and get medical advice.

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

Handling:

Airtight operation and local exhaust.The operator should be treated professionally and observe instructions seriously. The operator is suggested to wear self-inhalation filter type dust mask, protective chemical safety glasses, and protective gloves.Avoid producing dust and get in touch with acids.Should be light when load and unload to avoid breakage of packages.Equipped with emergency treatment equipment to avoid leakage.

Storage:

Store in dry, well ventilated and out of direct sunlight place.Have Waterproof Functions.Keep away from fire and heat.Stored apart with acids and not allowed mixed storage.With the suitable material for leakage in storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

Soda Lime Borosilicate Glass:

- OSHA Permissible Exposure Limit (PEL) -10 mg/m^3 (TWA).
- ACGIH Threshold Limit Value (TLV) -8 mg/m^3 (TWA).

Ventilation System: A system of local and/or general exhaust is recommended to keep

employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, a half-face dust/mist respirator 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 dust/mist respirator 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. 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 and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Low density white powder (< 130 microns) .

Color: White.

Odor: Odorless.

General Physical Form: Solid .

pH: 8-9.5

Specific gravity: 0.20-0.60g/cm^3 .

Vapor Density: Not applicable.

Boiling Point: Not applicable.

Flash Point: Not applicable.

Melting point: No Data Available.

Solubility in water: Negligible.

10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: No information found.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Data: When tested for primary irritation potential, this material caused mild eye irritation.

Special Studies: This materia is not listed by IARC, NTP or OSHA as a carcinogen.

12. ECOLOGICAL INFORMATION

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. DISPOSAL CONSIDERATIONS

Classification: Disposed material is not a hazardous waste.

Disposal Method: 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. Dispose of container and unused contents in accordance with state and local requirements.

14. TRANSPORT INFORMATION

This material is not regulated hazardous material for transportation.

15. REGULATORY INFORMATION

Domestic chemical safety management information:

In Safety Management Regulations for Hazardous Chemicals (issued by the State Council on 17th, Feb. 1987),detailed rules for implementation of Safety Management Regulations for Hazardous Chemicals,(issued by Chemistry and Labour Department No. 677 in 1992), and Regulations for Safe Usage of Chemicals in Workplace(issued by Labour Department No. 423 in 1996) etc., the related regulations have been stated about production, storage, transportation, handling and safe usage of hazardous chemicals.

Foreign chemical safety management information: None allocated.

16. OTHER INFORMATION

NFPA Hazard Classification

Health: 1 **Flammability:** 0 **Reactivity:** 0

HMIS Hazard Classification

Health: 1 **Flammability:** 0 **Reactivity:** 0

Label Hazard Warning: WARNING! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY AFFECT LUNGS.

Revision Information: No Changes.

ISSUED BY: SINOSTEEL MAANSHAN INSTITUTE OF MINING RESEARCH CO.,LTD

ANY AMENDMENT WILL BE ADDED IF NEEDED.