

GLASS BEADS / Type 1 and Type 3 Safety Data Sheet (SDS)



Date Revised: March 6, 2014

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Glass Beads / Type 1 and Type 3
PRODUCT USE: Reflective - road marking materials

SUPPLIER / MANUFACTURER: US Specialty Coatings / 1000 McFarland 400 Blvd / Alpharetta, GA 30004 USA
Company Phone Number: 770/ 740-8549 Fax: 770/ 740-8125
Emergency Telephone Number (24 Hours)
INFOTRAC 352-323-3500 (International)
INFOTRAC 1-800-535-5053 (North America)

SECTION 2 - HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Classification of the substance or mixture

Glass beads are not considered to be hazardous by the EPA under 29 CFR 1910.1200 and the Federal Register, Vol. 51, No. 221, pp 41582-41594. The RCRA status in unused material is not hazardous according to the list of CERCLA chemical. It is not on the toxic chemical list in the Committee Print Number 99-169.

Classification according to Regulation (EC) No 1272/2008 (CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No. 1272/2008/EC.

Classification according to Directive 1999/45/EC (DPD)

This mixture does not meet the criteria for classification in accordance with Directive 1999/45/EC.

GHS LABEL:

Labeling according to Regulation (EC) No 1272/2008 (CLP) Not required

SIGNAL WORD: **WARNING!**

| Hazard Statements | Precautionary Statements |
|---|---|
| Dust can cause irritation to the cornea and conjunctiva. Causes mild skin irritation. Localized redness, pruritus and/or pain. May cause irritation by the inhalation of dust. | Overexposure may cause temporary respiratory irritation. The product enters directly through the oral or nasal cavity. |

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| | CAS # | EINECS# | REACH (Pre-registration Number) |
|----------------------|---|-----------|---------------------------------|
| <i>Chemical Name</i> | 65997-17-3 | 266-046-0 | |
| | Glass Oxide - Soda Lime Glass SiO ₂ (68-75%), Na ₂ O (12-18%), CaO (7-12%), MgO (0-5%), Al ₂ O ₃ (0-2.5%) | | |

SECTION 4 - FIRST AID MEASURES

Contact with eyes: Remove contact lenses, if present and easy to do. Continue rinsing, irrigate copiously with clean, fresh water for at least 10 minutes, holding eyelids apart. Do not rub affected area.

Skin contact: Wash hands after handling beads and before eating. If skin irritation or rash occurs; get medical advice/attention.

Inhalation: If existing respiratory/conditions are aggravated in your use of this product, get to well ventilated area. If conditions persist seek medical advice/attention.

Ingestion: Rinse mouth with water (only if the person is conscious).

SECTION 5 - FIREFIGHTING MEASURES

Suitable Extinguishing Media: This product does not burn.

HMIS

NFPA

0-Minimal

| | | | | | |
|--|---|--------------|---|---|------------|
| Unsuitable Extinguishing Media: | None | Health | 1 | 0 | 1-Slight |
| Exposure Hazards: | None | Flammability | 0 | 0 | 2-Moderate |
| Combustion Products: | None | Reactivity | 0 | 0 | 3-Serious |
| Protection for Firefighters: | Filtering half-face mask (EN 149), P3 (filters at least 99.95% of airborne particles. 4-Severe) | | | | |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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|---|--|
| Personal precautions: | Wear gloves as required per job and Safety Glasses or Goggles for eye protection. |
| Environmental precautions: | Knock down dust with water spray. |
| Methods for Clean up: | Vacuum or sweep up excess material to avoid a possible slipping hazard. |
| Materials NOT to be used for Clean up: | Do not use compressed air for clean up. |
| Reference to other sections: | Personal protective equipment: see section 8, Disposal considerations: see section 13. |

SECTION 7 - HANDLING AND STORAGE

Handling: Don't use a brush or compressed air for cleaning surfaces or clothing. Avoid the release and swirling of dust. Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and PPE before entering eating areas.

Storage: When not in use, keep containers tightly closed. Store in a dry place. Removal of dust deposits (control of dust).

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

Occupational exposure limit values (Workplace Exposure Limits)

| Country (Identifier) - Source | Dust, particles | | | |
|--------------------------------|--------------------------|---------------------------|---------------------|---------------------|
| | TWA [mg/m ³] | STEL [mg/m ³] | ACGIH TLV | OSHA PEL |
| **US | | | 10mg/m ³ | 15mg/m ³ |
| GB (WEL) - acc. to "EH40/2005" | 10 (i) / 4 (r) | | | |
| KR (EL) - acc. to "MoEL" | 10 | | | |
| TW (PEL) - acc. to "CLA" | 10 (i) / 5 (r) | | | |

Notation

| | |
|---|---|
| i | inhalable fraction |
| r | respirable fraction |
| * | this OEL value corresponds to that of other listed phthalates |

| | |
|-------------------------|--|
| US (United States) | ** Conforms with all requirements of the (RCRA) Resource Conservation and Recovery Act of 1976 and the Federal Highway Administration MAP-21 "for heavy metals requirements for road markings" |
| GB (Great Britain) | WEL: Workplace Exposure Limits EH40/2005 Workplace exposure limits, Table 1: List of approved workplace exposure limits (as consolidated with amendments December 2011) (http://www.nationalarchives.gov.uk/doc/open-government-license/) |
| KR (Korea, Republic of) | EL:Exposure Limit MoEL: Ministry of Employment and Labor "Exposure limits of chemicals and physical agents" |
| TW (Taiwan) | PEL (Permissible Exposure Limits of hazardous substances in air) CLA: Council of Labor Affairs "Standards of permissible exposure limits of airborne hazardous substances in workplace" |

Appropriate engineering controls

Don't use a brush or compressed air for cleaning surfaces or clothing. Regular cleaning of work area. Use a vacuum cleaner fitted with an HEPA filter.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety glasses or goggles with side protection.



Skin protection

- hand protection

Wear protective gloves



- other protection measures

Wash hands thoroughly after handling. Wear suitable working clothes.

Respiratory protection

Use respiratory protection for dust-intensive work: NIOSH approved dust respirator or dust mask; Filtering half-face mask

(EN 149).

Environmental exposure controls

Control of dust. Use of compressed air to clean clothes prohibited.



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------------------|---|------------------------------|--|
| Appearance: | solid (spherical) | Odor Threshold: | not applicable |
| Odor: | Odorless | Boiling Range: | not applicable |
| pH: | not applicable | Evaporation Rate: | not applicable |
| Melting / Freezing Point: | >2000° F, 1400° C, transition temperature: 1166° F, 630° C. | Flammability: | not applicable |
| Boiling Point: | not applicable | Flammability Limits: | LEL: not applicable UEL: not applicable |
| Flash Point: | not applicable | Vapor Pressure: | not applicable |
| Specific Gravity: | 2.4 - 2.6 g/cm ³ | Explosive properties: | not applicable |
| Solubility: | insoluble | Oxidizing properties: | not applicable |
| Auto-ignition Temperature: | not applicable | Bulk density: | 1.2 - 1.8 g/cm ³ (depending on the grain size) |
| VOC Content: | not applicable | | |

SECTION 10 - STABILITY AND REACTIVITY

| | |
|--|---|
| Stability: | There are no conditions to avoid. |
| Hazardous decomposition products: | Decomposition as a result of use, storage, spill and heating are not known. |
| Conditions to avoid: | There are no specific conditions known which have to be avoided. |
| Incompatible Materials: | There is no additional information. |

SECTION 11 - TOXICOLOGICAL INFORMATION

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|-------------------------------------|---|
| Likely Routes of Exposure: | Inhalation, Ingestion |
| Acute symptoms and effects: | Shall not be classified as acutely toxic. |
| Inhalation: | Shall not be classified as a respiratory or aspiration hazard. |
| Skin Contact: | Shall not be classified as a skin sensitizer. |
| Ingestion: | Shall not be classified as a specific target organ toxicant (STOT). |
| Chronic (long-term) effects: | This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC. |

SECTION 12 - ECOLOGICAL INFORMATION

| | |
|-------------------------|---|
| Eco toxicity: | Shall not be classified as hazardous to the aquatic environment (acc. To 1272/2008/EC). |
| Mobility: | Data are not available |
| Degradability: | Data are not available |
| Bioaccumulation: | Data are not available |

SECTION 13 - WASTE DISPOSAL CONSIDERATIONS

Glass beads may be disposed in a solid waste landfill if permitted by applicable Federal, State, and Local Regulation. Considered non-hazardous waste in accordance with Article 3 (2) in conjunction with Annex III of Directive 2008/98/EC.
Follow local and national regulations. Consult disposal expert.

SECTION 14 - TRANSPORT INFORMATION

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| Proper Shipping Name: | Not relevant (not subject to transport regulations) |
| Hazard Class: | not relevant |
| Secondary Risk: | not relevant |
| Packaging Group: | not relevant |
| Identification Number: | Overseas shipment only (HF tariff classification) - 7018.20 |
| Label Required: | not relevant |
| Marine Pollutant: | none (non-environmentally hazardous acc. to the dangerous good regulation) |

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|--------------------------------------|
| EXCEPTION for Ground Shipping |
| DOT Limited Quantity: |
| Consumer Commodity: |

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|---------------------------------|
| TDG INFORMATION |
| TDG CLASS: |
| SHIPPING NAME: |
| UN NUMBER/PACKING GROUP: |

SECTION 15 - REGULATORY INFORMATION

| | |
|---|---------------|
| Precautionary Label Information: | see section 2 |
| Ingredient Listings: | see section 3 |
| Symbols: | see section 8 |
| Risk Phrases: | see section 2 |
| Safety Phrases: | see section 2 |

SECTION 16 - OTHER INFORMATION

Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|--------|---|
| OSHA | Occupational Safety & Health Administration |
| NIOSH | National Institute of Occupational Safety and Health |
| PPE | Personal Protective Equipment |
| REACH | Registration, Evaluation, Authorization and Restriction of Chemicals |
| EPA | Environmental Protection Agency |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CLP | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures |
| DPD | Dangerous Preparations Directive (1999/45/EC) |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |

Key literature references and sources for data

- OSHA 29 CFR 1910.1200 appendix D
- EPA under Federal Register, Vol. 51, No. 221, pp 41582 - 41594
- Regulation (EC) No. 1907/2006 REACH, amended by 453/2010/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards/Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Disclaimer

All information and data appearing on this Safety Data Sheet are provided in good faith and are believed to be reliable and accurate to the best of our knowledge at the date of publication. Although certain hazards are listed herein, there is no guarantee that these are only risks. None of the provided information is to be considered a warranty or quality specification or all-inclusive and is given only as a guidance. It is the user's responsibility to determine the safety of use, handling, storage, transportation, disposal, and suitability for the intended utilization of the product. Unless otherwise specified, the data provided herein is valid only for the described material and may be not applicable for the product used in combination with any other materials or processes.