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

Dust can cause irritation to the cornea and conjunctiva.

Causes mild skin irritation. Localized redness, pruritus and/or

Precautionary Statements

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) |
|----------------|-----------|---------------------------------|
| 65997-17-3 | 266-046-0 | |

Chemical Name Glass Oxide - Soda Lime Glass

SiO2 (68-75%), Na2O (12-18%), CaO (7-12%), MgO (0-5%), Al2O3 (0-2.5%)

SECTION 4 - FIRST AID MEASURES

pain. May cause irritation by the inhalation of dust.

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. <u>HMIS</u> <u>NFPA</u> 0-Minimal

0 Unsuitable Extinguishing Media: None 1 Health 1-Slight 0 **Exposure Hazards:** None Flammability 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

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)

Dust, particles

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

Notation

inhalable fraction respirable fraction

* this OEL value corresponds to that of other listed phthalates

US (Untied 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

Environmental exposure controls

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



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Odor Threshold: Appearance: solid (spherical) not applicable Odor: **Boiling Range:** not applicable Odorless pH: **Evaporation Rate:** not applicable not applicable **Melting / Freezing Point:** >2000° F, 1400° C, transition Flammability: not applicable

temperature: 1166° F, 630° C. Flammability Limits: LEL: not applicable

Boiling Point: not applicable **UEL:** not applicable Flash Point: **Vapor Pressure:** not applicable not applicable 2.4 - 2.6 ^g/cm³ Specific Gravity: **Explosive properties:** not applicable Solubility: **Oxidizing properties:** insoluble not applicable 1.2 - 1.8 ^g/cm³ **Auto-ignition Temperature: Bulk density:** not applicable

VOC Content: not applicable (depending on the grain size)

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

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

Proper Shipping Name: Not relevant (not subject to transport regulations)

Hazard Class: not relevant EXCEPTION for Ground Shipping
Secondary Risk: not relevant DOT Limited Quantity:

Secondary Risk: not relevant DOT Limited Quantity:
Packaging Group: not relevant Consumer Commodity:

Identification Number: Overseas shipment only (HF tariff classification) - 7018.20

Label Required: not relevant TDG INFORMATION

Marine Pollutant: none (non-environmentally hazardous acc. to the dangerous good regulation)

TDG CLASS:

SHIPPING NAME:

UN NUMBER/PACKING GROUP:

SECTION 15 - REGULATORY INFORMATION

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