



## MIL-PRF-9954-D

### SIZE 10 GLASS BEADS

Soda Lime Glass Spheres for industrial applications

US MESH	MICRON	% PASSING
80	180	100
100	150	95-100
170	90	0-15
200	75	0-5

Composition Glass bead media shall be newly manufactured material from commercial grade soda lime glass and contain <1% crystalline silica. Glass beads shall contain no less than 62% amorphous silica.

Appearance Beads shall be colorless, transparent, spherically shaped and conform to the above gradation in accordance with ASTM D1214 and / or AASHTO PP-74

Roundness Minimum 90% true spheres as measured according to ASTM D-1155 and/or AASHTO PP-74. Less than 3% shall be scored, broken or unfused, angular glass bead particles.

Specific Gravity The specific gravity of the glass beads shall be no less than 2.3

Moisture resistance & Flow Characteristics Beads shall not absorb moisture when stored properly. They shall remain free of clusters and lumps and flow freely from dispensing equipment.

Magnetic Iron Particles Glass beads shall contain no more than 0.1% by weight of free magnetic iron particles

Heavy Metals Glass Beads shall contain <75 PPM Arsenic and <100 PPM Lead by weight in accordance with EPA 3052 and EPA 6018B or generally accepted method with traceable standards.

If you have any questions about proper application techniques or other technical support issues, please contact your Swarco sales or customer service representative.

Above information should not be taken as a warranty or representation for which we assume legal responsibility.  
It is offered solely for your consideration, investigation and verification.

# GHS SAFETY DATA SHEET (SDS)



Date Revised: September 11, 2017  
Supersedes: September 30, 2014

**GLASS BEADS**  
for all sizes and types

Version number: GHS 1.0

according to OSHA 29 CFR 1910.1200 appx. D and Regulation (EC) No. 1907/2006 (REACH)

## SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Standard Beads, Blends, MEGALUX-BEADS®  
**PRODUCT USE:** Reflective, grinding, blasting, decorative and filling beads - road marking materials - drop on materials

**SUPPLIER / MANUFACTURER:** Swarco Reflex, LLC  
PO Box 1558 - 900 N. Denton St.  
Mexia, TX 76667 Ph.: (254) 562-9879 Fax: (254) 562-7601  
Swarco Industries LLC  
270 Rutherford Lane  
Columbia, TN 38402 Ph.: (931) 388-5900 Fax: (931) 388-4039

**EMERGENCY:** 1-(800) 216-8781-TN, 1-(877) 634-2589 TX Website: [www.swarco.com/americas](http://www.swarco.com/americas)

## 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:

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

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)
Chemical Name	65997-17-3	266-046-0	
	Glass Oxide - <b>Soda Lime Glass</b>		
	Amorphous, no hazardous substance (no free Silica)		

## 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.

**Unsuitable Extinguishing Media:** None

	<b>HMIS</b>	<b>NFPA</b>	
Health	1	0	0-Minimal 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

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)

Glass Oxide - <i>Soda Lime Glass</i>		5mg/m <sup>3</sup> respirable			
		Dust, particles			
Country (Identifier) - Source		TWA [mg/m <sup>3</sup> ]	STEL [mg/m <sup>3</sup> ]	ACGIH TLV	OSHA PEL
**US				10mg/m <sup>3</sup>	15mg/m <sup>3</sup>
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) ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
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

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

### SECTION 10 - STABILITY AND REACTIVITY

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

### SECTION 11 - TOXICOLOGICAL INFORMATION

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

### SECTION 12 - ECOLOGICAL INFORMATION

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

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

<b>EXCEPTION for Ground Shipping</b>
<b>DOT Limited Quantity:</b>
<b>Consumer Commodity:</b>

<b>TDG INFORMATION</b>
<b>TDG CLASS:</b>
<b>SHIPPING NAME:</b>
<b>UN NUMBER/PACKING GROUP:</b>

### SECTION 15 - REGULATORY INFORMATION

<b>Precautionary Label Information:</b>	see section 2
<b>Ingredient Listings:</b>	see section 3
<b>Symbols:</b>	see section 8
<b>Risk Phrases:</b>	see section 2

