

# HIGHWAY

STANDARD & PREMIUM SAFETY MARKING SPHERES

Durable, versatile and highly reflective... in all marking systems

## STANDARD

### Potters Standard Highway Spheres— Cost-effective Highway Delineation

- Retroreflective pavement markings deliver continuous roadway guidance to drivers and have been proven to increase highway safety.
- Our Standard Highway Marking Spheres provide cost-effective nighttime roadway delineation, and can meet any specific standard glass bead specification in North America.
- Our Standard spheres are consistent in quality and composition. Strict quality control produces spheres that optimize retroreflectivity. Proprietary coatings are available to resist agglomeration, ensure flotation for ideal embedment and improve adhesion for greater durability.
- Standard spheres may be applied as a drop-on in all commercial binders, including waterborne paint, epoxy, polyester, thermoplastic, PMMA and polyurea.
- Our beads meet the rigorous heavy metals limitations set forth by state and federal standards.

### Standard Spheres: Facts and Figures

- **Size:** 20–80 mesh (850–150 microns); a range of sizes offsets effects of traffic/binder degradation.
- **Compatible binders:** waterborne or solvent-based paint, epoxy, polyester, thermoplastic, PMMA, polyurea
- **Standards:** Spheres can be supplied to meet state specifications for gradation (size), roundness and coatings. Potters Industries is able to supply glass beads which meet any specific standard glass bead specification in North America.



**Potters Industries Inc.**  
an affiliate of PQ Corporation

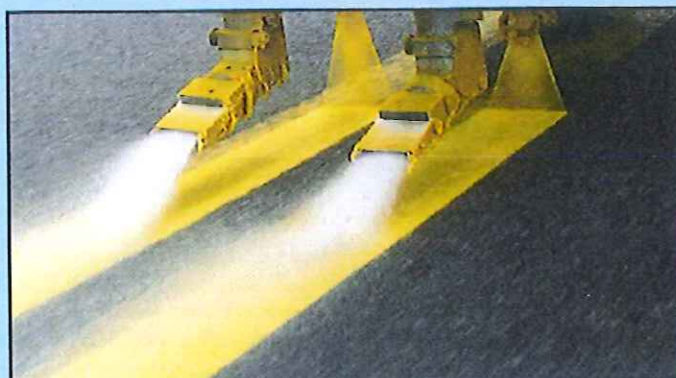
Potters respects the environment by recycling over one billion pounds of glass each year.

Our beads meet the rigorous heavy metals limitations set forth by state and federal standards.

### Typical Standard Bead Size

U.S. Mesh Size	Millimeters	Mass % Passing
16	1.18	100
20	0.850	95-100
30	0.600	75-95
50	0.300	15-35
100	0.150	0-5

AASHTO M-247, Type 1, Roundness—70%, 75%, and 80% overall by sieve size.



Potters retroreflective pavement markings deliver continuous roadway guidance to drivers and have been proven to increase highway safety.

See Your Potters Representative or Call (800) 55-BEADS  
Visit Us On The Web at [www.pottersbeads.com](http://www.pottersbeads.com)





# VISIBEAD®

HIGHWAY SAFETY MARKING SPHERES

Durable, versatile and highly reflective... in all marking systems

## VISIBEAD® Is Clearly Superior For Adverse Weather Conditions

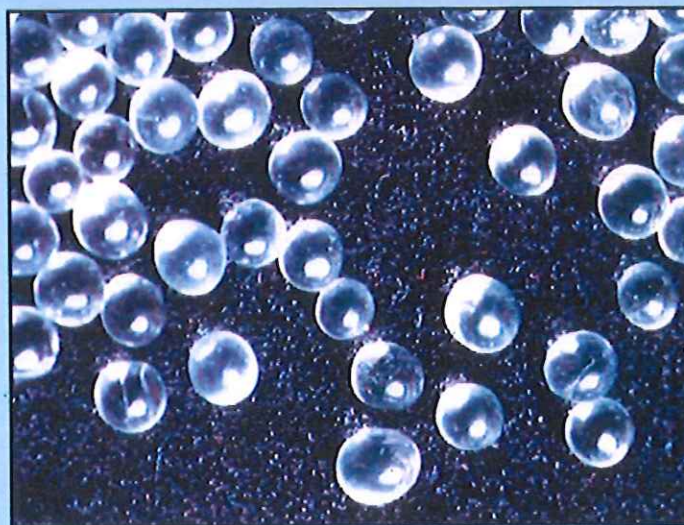
- VISIBEAD Highway Safety Marking Spheres enhance drivers' nighttime visibility, particularly in rain, fog or melting snow, for dramatic improvements in mobility and highway safety.
- Because VISIBEAD spheres are three to four times larger than conventional glass beads, they stand higher above the surface of the line than conventional beads, delineating highway markings clearly and providing superior wet night visibility.
- Potters Industries manufactures VISIBEAD spheres using proprietary technology to ensure consistent quality, improved durability and unique clarity. Specialized coatings enable VISIBEAD spheres to combine chemically with the binder, improving adhesion, optimizing embedment and maximizing long-term retroreflectivity.
- Potters Industries' VISIGUN® safety marking sphere dispenser is designed for optimal application of VISIBEAD spheres.
- VISIBEAD Spheres are easy to apply with existing equipment.
- Our beads meet and exceed the rigorous heavy metals limitation standards set forth by state and federal standards.

## VISIBEAD Facts and Figures

- **Size:** 14–20 mesh (1.4–0.85 mm); a range of sizes offsets the effects of traffic and binder degradation.
- **Compatible binders:** waterborne or solvent-based paint, epoxy, polyester, thermoplastic, PMMA and polyurea.
- **Standards:** Most states specify gradation (size), roundness and coating requirements for highway marking beads. VISIBEAD spheres meet the U.S. Department of Transportation Federal Highway Administration's FP-03 specifications.



VISIBEAD Spheres use proprietary technology to ensure consistent quality, improved durability and unique clarity.



VISIBEAD Spheres are three to four times larger than conventional glass beads, and stand higher above the surface of the line, delineating highway markings clearly and providing superior visibility.



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**Potters respects the environment by recycling over one billion pounds of glass each year.**

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Highway Safety Marking Spheres with Coating

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name

Highway Safety Marking Spheres with Coating  
Standard Highway Safety Marking Spheres with Coating  
Premium Highway Safety Marking Spheres with Coating  
VISIBEAD® Highway Safety Marking Spheres with Coating  
VISIBEAD® Plus II Highway Safety Marking Spheres with  
Coating  
Premix Highway Safety Marking  
CAS No. 65997-17-3  
EINECS No. 2660460

1.2 Relevant identified uses of the substance or mixture and uses advised against  
Identified use(s) Road safety markings

#### 1.3 Details of the supplier of the safety data sheet

Company Identification

Potters Industries LLC  
P. O. Box 841  
Valley Forge, PA 19482 USA  
+1 610-651-4700  
sds.uk@pqcorp.com

Telephone

E-Mail (competent person)

#### 1.4 Emergency telephone number

Emergency Phone No.

Potters Industries LLC +1 610-651-4200  
ChemTrec (800) 424-9300

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GHS Classification

Not classified as dangerous for supply/use.

EC Classification

Not classified as dangerous for supply/use.

Hazards summary

Dust may cause irritation. Spilled material is slippery .

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	%W/W	CAS No.	EINECS No. / REACH Registration	EC Classification and Risk Phrases
Glass oxide; Glass	>99	65997-17-3	2660460	Not applicable.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

Eye Contact

Irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. If symptoms persist, obtain medical attention.

Skin Contact

Wash affected skin with plenty of water. If symptoms occur obtain medical attention.

Inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. If symptoms develop, obtain medical attention.

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Ingestion

Do not induce vomiting. If symptoms develop, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Dust may cause irritation. Spilled material is slippery. Dust may cause discomfort and mild irritation.

## **SECTION 5: FIRE-FIGHTING MEASURES**

5.1 Extinguishing media

Suitable Extinguishing Media

As appropriate for surrounding fire.

Unsuitable extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

Spilled material can make floors slippery.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing. Wear eye/face protection.

6.2 Environmental precautions

Not applicable.

6.3 Methods and materials for containment and cleaning up

Caution - spillages may be slippery. Avoid generation of dust. Sweep or preferably vacuum up and collect in suitable containers for recovery or disposal.

6.4 Reference to other sections

Not applicable.

## **SECTION 7: HANDLING AND STORAGE**

7.1 Precautions for safe handling

Avoid contact with eyes, skin and clothing. Avoid generation of dust. Wash thoroughly after handling.

Wear protective equipment to comply with good occupational hygiene practice.

Do not eat, drink or smoke at the work place.

Keep container tightly closed and dry.

7.2 Conditions for safe storage, including any incompatibilities

7.3 Specific end use(s)

Not applicable.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters

SUBSTANCE.	Occupational Exposure Limits
Glass oxide; Glass	No Occupational Exposure Limit assigned. 15mg/m <sup>3</sup> total dust 5mg/m <sup>3</sup> respirable (Particulates Not Otherwise Regulated)

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

8.2.2 Personal Protection

Respiratory protection

Wear suitable respiratory protective equipment if working in confined spaces with inadequate ventilation or where there is any risk of the exposure limits being exceeded.

Eye/face protection

Safety spectacles

Skin protection

Wear suitable protective clothing and gloves. For example cotton or rubber.

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## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

Appearance	Glass Powder , White.
Odour	Odourless.
Odour Threshold (ppm)	Not applicable.
pH (Value)	Not applicable.
Freezing Point (°C)	Not applicable.
Melting Point (°C)	Approx 730 C
Boiling Point (°C)	Not applicable.
Flash Point (°C) [Closed cup]	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-combustible.
Vapour Pressure (mm Hg)	Not applicable.
Vapour Density (Air=1)	Not applicable.
Solubility (Water)	Insoluble.
Partition Coefficient	Not applicable.
Auto Ignition Point (°C)	Not applicable.
Decomposition Temperature (°C)	Not applicable.
Viscosity (mPa. s)	Not applicable.
Explosive properties	Not applicable.
Oxidising Properties	Not applicable.
9.2 Other Information	Not available.

## **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity	Avoid contact with strong acids
10.2 Chemical stability	Stable.
10.3 Possibility of hazardous reactions	Not applicable.
10.4 Conditions to avoid	Not applicable.
10.5 Incompatible materials	None known.
10.6 Hazardous decomposition product(s)	None known.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

Acute toxicity	
Ingestion	The acute oral toxicity of this product has not been tested. A similar material was nontoxic to rats at 5,000 mg/kg.
Inhalation	No data. May cause irritation to the respiratory system.
Skin Contact	Dust may cause mechanical irritation.
Eye Contact	Dust may cause mechanical irritation.
Sensitisation	Not sensitising.
Carcinogenicity	There are no known reports of carcinogenicity of nonfibrous glass.
Reproductive toxicity	No evidence of reproductive effects.

## **SECTION 12: ECOLOGICAL INFORMATION**

12.1 Toxicity	No environmental hazards have been reported or known.
12.2 Persistence and degradability	This material is persistent but inert in aquatic systems. It will not bioconcentrate up the food chain.
12.5 Results of PBT and vPvB assessment	Not classified as PBT or vPvB.



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12.6 Other adverse effects      Not applicable

### **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1 Waste treatment methods      The waste is considered to be non hazardous. Disposal should be in accordance with local, state or national legislation.

### **SECTION 14: TRANSPORT INFORMATION**

14.2 Proper Shipping Name      NOT CLASSED AS DANGEROUS FOR TRANSPORT.

### **SECTION 15: REGULATORY INFORMATION**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

TSCA Inventory Status: Reported/Included.

AICS Inventory Status: Reported/Included.

DSL/NDSL Inventory Status: Reported/Included.

WHMIS Classification Not classified.

German Water Hazard Classification VwVwS: WGK class 1 (low hazard to water).

HMIS: 0,0,0

### **SECTION 16: OTHER INFORMATION**

This SDS was last reviewed: 08/2014

The following sections contain revisions or new statements: All sections.

EC Classification No. 67/548/EEC      Not classified as dangerous for supply/use.

GHS Classification      Not classified as dangerous for supply/use.

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