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Protest Decision

Matter of: Potters Industries, LLC

Case No.: 2021-102

Posting Date: July 31, 2020

Contracting Entity: SC Department of Transportation

Solicitation No.: 5400019280

Description: Glass Beads for Traffic Paint

DIGEST

Protest that apparent successful bidder is not responsive / responsible is denied. The protest letter of Potters Industries, LLC (Potters) is included by reference. (Attachment 1)

AUTHORITY

The Chief Procurement Officer¹ (CPO) conducted an administrative review pursuant to S.C. Code Ann. §11-35-4210(4). This decision is based on materials in the procurement file and applicable law and precedents.

¹ The Materials Management Officer delegated the administrative review of this protest to the Chief Procurement Officer for Information Technology.

BACKGROUND

Solicitation Issued:	05/12/2020
Amendment 1 Issued	06/04/2020
Intent to Award Posted	07/17/2020
Intent to Protest Received	07/17/2020
Protest Received	07/23/2020

The South Carolina Department of Transportation (DOT) issued this Invitation for Bids on May 12, 2020 to acquire glass beads used in traffic paint. Bids were received on June 10, 2020. An Intent to Award was posted to Ozark Materials, LLC (Ozark) on July 17, 2020. Potters filed an Intent to Protest on July 17, 2020 and submitted its official letter of protest on July 23, 2020 alleging that Ozark is not a manufacturer of glass beads as required by the solicitation.

ANALYSIS

Potters' alleges:

Potters' protest is based upon improper acceptance of a non-responsive bid. Specifically, Potters understands that Ozark was unable to deliver customer references in its bid as required by "References" section on page 15 of the Solicitation, which expressly provides:

"Bidders will submit three (3) **references** from companies that they have provided glass beads in the last two **(2) years**. The references will demonstrate that the bidder is an established manufacturer of reflective glass beads and is capable of supply (sic) conforming material under this contract in a timely fashion. Minimally, the references will provide the total weight of beads produced in the twelve months prior to the auction and either a) SCDOT File Number of at least three construction projects for which the bidder has supplied retroreflective beads within the last **36 months**; b) the period during which the bidder has supplied beads on previous contracts for SCDOT maintenance offices within the last **36 months**; or c) other entities (including contact information) that the bidder has supplied with retroreflective glass beads in quantities of at least 75% of the quantity of this auction within the last **36 months**. The references may also include any other information the bidders believe would be helpful in determining their suitability for qualification for this auction." (emphasis in original)....

Potters understands that Ozark does not manufacture any glass beads and does not have the capability to do so. Therefore, Ozark could not possibly

have provided the required references demonstrating that Ozark is an "established manufacturer of glass beads" - an express requirement of the Solicitation.

In order to be responsive, a bid must conform to all the material and essential requirements of the solicitation. See Section 11-35-1410(9) The Procurement Review Panel has held that a material and essential requirement of a solicitation must have no effect or merely a trivial or negligible effect on total bid price, quality, quantity, or delivery of the supplies or performance of the contract, and the correction or waiver of which would not be prejudicial to bidders. See *Appeal by Coastal Rapid Public Transit Authority and Anderson-Oconee Council on Aging*, Panel Case 2000-4.

The solicitation requested references to “demonstrate that the bidder is an established manufacturer of reflective glass beads and is capable of supplying conforming material under this contract in a timely fashion.” (emphasis added) Prior to award, the State is required to make a determination as to whether the apparent successful bidder has the capacity to perform the requirements of the contract:

Determination of Responsibility. Responsibility of the bidder or offeror shall be ascertained for each contract let by the State based upon full disclosure to the procurement officer concerning capacity to meet the terms of the contracts and based upon past record of performance for similar contracts. The board shall by regulation establish standards of responsibility that shall be enforced in all state contracts.

Section 11-35-1810(1).

A responsible bidder is defined in Section 11-35-1410(8) as:

'Responsible bidder or offeror' means a person who has the capability in all respects to perform fully the contract requirements and the integrity and reliability which will assure good faith performance which may be substantiated by past performance.

The State Standards of Responsibility are found in Regulation 19-445.2125(A) which provides:

Factors to be considered in determining whether the state standards of responsibility have been met include whether a prospective contractor has:

- (1) available the appropriate financial, material, equipment, facility, and personnel resources and expertise, or the ability to obtain them, necessary to indicate its capability to meet all contractual requirements;
- (2) a satisfactory record of performance;

- (3) a satisfactory record of integrity;
- (4) qualified legally to contract with the State; and
- (5) supplied all necessary information in connection with the inquiry concerning responsibility.

Ozark provided three references with its bid.² Potters' protest that Ozark is not a manufacturer and consequently cannot provide appropriate references challenges Ozark's ability to perform the contract and the procurement officer's determination that Ozark is a responsible bidder, rather than the responsiveness of Ozark's bid.

Section 11-35-2410(A) sets the standard for review of the procurement officer's determination of a bidder's responsibility made under Section 11-35-1810:

The determinations required by the following sections and related regulations are final and conclusive, unless clearly erroneous, arbitrary, capricious, or contrary to law:... Section 11-35-1810 (Responsibility of Bidders and Offerors),

The South Carolina Procurement Review Panel provided additional guidance for reviewing determinations of responsibility in *In Re: Appeal by Allied Waste Services, Panel Case 2013-12*:

In reviewing a determination of non-responsibility, the Panel must decide whether the determination is "clearly erroneous, arbitrary, capricious, or contrary to law." S.C. Code Ann. §11-35-2410(A) (2011). Moreover, as the appealing party, Allied bears the burden of proof before the Panel. See *In re: Protest of Value Options, et al.*, Panel Case No. 2001-7 at 7 (August 3, 2001) ("The burden of proof is on the appellants to demonstrate by a preponderance of the evidence that the determination made by the procurement officer is clearly erroneous, arbitrary, capricious or contrary to law."). In *Value Options* the Panel also observed that procurement officers are given broad discretion in making their responsibility determinations because these are a matter of business judgment. As such, the Panel noted that it will not overturn a finding of non-responsibility on the grounds that it is arbitrary or capricious unless the appellant "'demonstrate[s] a lack of reasonable or rational basis for the agency decision or subjective bad faith on the part of the procuring officer or clear and prejudicial violation of relevant statutes and regulations which would be tantamount to a lack of reasonable or rational basis.'" *Id.* (quoting *Robert E. Derecktor of Rhode Island, Inc., v. Goldschmidt*, 516 F. Supp. 1085 (D. R.I. 1981)).

² In accordance with Section 11-35-410, The CPO will not publish Ozark's reference information.

In addition to the request for references, the solicitation required bidders include specifications and a Material Safety Data Sheet (MSDS) for the products bid:

SALES LITERATURE AND SPECIFICATIONS (SPECIAL)

Each bidder will attach to his bid illustrated catalog data sheets with manufacturer's complete printed specifications covering the class or type of product covered by the bid. This material will show reasonable evidence of having been printed before publication of the bid notice and will be sufficiently detailed to permit the SCDOT's engineers to properly evaluate the bid.

MATERIAL SAFETY DATA SHEETS (SPECIAL)

Each bidder will attach to his bid Material Safety Data Sheets (concerning information required by CFR 29, Chapter XVII, OSHA, Section 1910.1200, Hazard Communication) covering each product in the bid.

[Solicitation, Page 15]

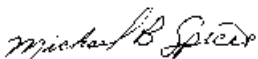
Ozark provided the specification sheet and MSDS on Ozark letterhead for the products bid.
(Attachment 2)

Potters protests that it "understands that Ozark does not manufacturer any glass beads," but provides no basis for this understanding. Speculation that a vendor will be unable to perform the contract does not state a proper challenge to responsibility. *In Re: Appeal by Catamaran, LLC*, Panel Case No. 2015-2. Potters has failed to meet the burden of proof by a preponderance of the evidence that Ozark is not a manufacturer of glass beads or that the determination of responsibility made by the procurement officer is clearly erroneous, arbitrary, capricious or contrary to law.

DECISION

For the reasons stated above, the protest of Potters Industries, LLC is denied.

For the Materials Management Office



Michael B. Spicer
Chief Procurement Officer



PO Box 841
Valley Forge PA 19482
1-800-55-BEADS
www.pottersbeads.com

July 23, 2020
Chief Procurement Officer, Materials Management Office
1201 Main Street
Suite 600
Columbia, SC 29201
protest-mmo@mmo.state.sc.us

Attn: Jeffery Schwalk
SCDOT Procurement Office
955 Park Street Room 101
Columbia, SC 29201-3959

SENT VIA MAIL and ELECTRONIC MAIL

**PROTEST OF THE AWARD OF CONTRACT NO. 4400024310 TO OZARK
MATERIALS, LLC**

Dear Sir or Madam:

Potters Industries, LLC ("Potters") writes to formally protest the award of Contract No. 4400024310 for AASHTO M 247, Type I glass beads to Ozark Materials, LLC ("Ozark") pursuant to Section 11-35-4210 of the South Carolina Code. The grounds for Potters' protest are set forth below.

Potters' protest is based upon improper acceptance of a non-responsive bid. Specifically, Potters understands that Ozark was unable to deliver customer references in its bid as required by "References" section on page 15 of the Solicitation, which expressly provides:

"Bidders will submit three (3) **references** from companies that they have provided glass beads in the last two (2) **years**. The references will demonstrate that the bidder is an established manufacturer of reflective glass beads and is capable of supply conforming material under this contract in a timely fashion. Minimally, the references will provide the total weight of beads produced in the twelve months prior to the auction and either a) SCDOT File Number of at least three construction projects for which the bidder has supplied retroreflective beads within the last **36 months**; b) the period during which the bidder has supplied beads on previous contracts for SCDOT maintenance offices within the last **36 months**; or c) other entities (including contact information) that the bidder has supplied with retroreflective glass beads in quantities of at least 75% of the quantity of this auction within the last **36 months**. The references may also include any other information the bidders believe would be helpful in determining their suitability for qualification for this auction." (emphasis in original).



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Valley Forge PA 19482
1-800-55-BEADS
www.pottersbeads.com

Potters understands that Ozark does not manufacture any glass beads and does not have the capability to do so. Therefore, Ozark could not possibly have provided the required references demonstrating that Ozark is an “established manufacturer of glass beads” – an express requirement of the Solicitation. Likewise, any references provided by Ozark must also have been unable to provide the total weight of beads produced by Ozark in the twelve months prior to the auction – another requirement of the Solicitation. Ozark has not and still does not manufacture glass beads, and therefore its production weight of beads over the past three years must be zero.

Potters also understands that Ozark has not supplied any retroreflective glass beads to SCDOT within the last 36 months, nor has Ozark supplied retroreflective glass beads in quantities of at least 75% of the quantity required by the Solicitation within the last 36 months. Thus, Ozark also cannot satisfy the minimum reference requirements required by the Solicitation.

Pursuant to the Award Criteria – Bids section of the Solicitation, located on page 18, the “Award will be made to the lowest responsible and responsive bidder.” For the reasons set forth above, Ozark’s bid fails to conform to the material requirements of the Solicitation and must be rejected as non-responsive according to the of the “Responsiveness/Improper Offers” section on pages 8-9 of the Solicitation. Accordingly, the contract award to Ozark was made in violation of the Award Criteria and South Carolina law.

Potters respectfully requests that the South Carolina Department of Transportation Procurement Office: (1) declare Ozark’s bid to be non-responsive; (2) rescind the contract award to Ozark; and (3) award Contract No. 4400024310 to Potters as the lowest responsible bidder.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'Yvonne D. Harris', is written over the typed name.

Yvonne D. Harris
Contract Administrator



GLASS BEADS SAFETY DATA SHEET TYPE 1,2,3,4

Revision 7-9-19

1. Identification

Product identifier	Ozark Type 1, 2, 3, and 4
Synonyms	Glass Beads, GLASS, OXIDE
Recommended use	Traffic Markings
Recommended restrictions	None known
Manufacturer/Supplier	Ozark Materials, LLC 591 Glendale Ave. Greenville, AL 36037
Emergency Response Phone Number	CHEMTREC 800-424-9300

2. Hazard(s) Identification

GHS CLASSIFICATION

Classification of the substance or mixture Not classified as hazardous according to GHS standards.
Health Hazards: The substance does not meet the criteria for classification.

Environmental

Acute Toxicity None Known

Chronic Toxicity None Known

Physical hazards The substance does not meet the criteria for classification.

Label elements

Signal word NONE

Hazard statements The substance does not meet the criteria for classification.

Precautionary statements

Prevention P201+P202: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Response P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P304: **IF INHALED:** Remove person to fresh air and Keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305: **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302+P352+P363: **IF ON SKIN:** Wash with plenty of water. Wash contaminated clothing before reuse.

Storage P402+P403+P404: Store in a dry place. Store in a well ventilated place.
 Store in a closed container.

Disposal P501: Dispose of contents/ container to an approved waste disposal plant.

Hazard(s) not otherwise classified (HNOC) Spilled material is extremely slippery.

3. Composition/Information on Ingredients

Chemical Name (Common / Other Names)	CAS number	%
Glass. Oxides, Chemicals	65997-17-3	>99%

The criteria for listing components in the composition are as follows: Carcinogens are listed when present at 0.1% or greater; components, which are otherwise hazardous according to OSHA, are listed when present at 1.0% or greater. Non-hazardous components may be listed at 3.0% or greater if not proprietary in nature. This is not intended to be complete compositional disclosure. Refer to Section 15 for applicable states right-to-know and other regulatory information.

4. First-Aid Measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
Skin contact	Wash off with soap and plenty of water. Remove Contaminated Clothing and shoes. Get medical attention if Irritation occurs. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact	Flush eyes with water as a precaution.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Chronic (long-term) effects	Not Known

5. Fire-Fighting Measures

Suitable extinguishing media	This material is compatible with all extinguishing media. Extinguish preferably with dry chemical, foam or water spray.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Silicon oxides
Special protective equipment and precautions for firefighters	A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Spilled material is extremely slippery. Wear rubber boots with slip-resistant soles.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Spilled material can be very slippery. Wear rubber boots with slip-resistant soles. See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Collect mechanically and dispose of according to Section 13. Transfer to a lidded container for disposal or recovery. Avoid dust generation. Ensure adequate ventilation. Do not walk through spilled material.

7. Handling and Storage

Precautions for safe handling	Avoid contact with skin, eyes, and clothing. Wash hands before eating, drinking or smoking.
Conditions for safe storage, including any incompatibilities	Avoid accumulation of dust. Use only in well-ventilated areas. Store in the original container in a cool, dry, well-ventilated area. Keep containers tightly sealed. Incompatible Materials: Dissolves in hydrofluoric acid.

8. Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
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Glass, Oxides, Chemicals (CAS No. 65997-17-3)	PEL (TWA)	15 mg/m ³ (total dust), 5 mg/m ³ (respirable)
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US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Glass, Oxides, Chemicals (CAS No. 65997-17-3)	8-hour TWA	5 mg/m ³ (respirable)

US. OSHA Table Z-3 Mineral dusts (29 CFR 1910.1000)

Respirable fraction greater than 5% SiO ₂	%SiO ₂ + 2 mg/m ³
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US. OSHA Table Z-2 (29 CFR 1910.1000)

None of the components in this product is listed

US. ACGIH Threshold Limit Values

Components	Type	Value
Glass, Oxides, Chemicals (CAS No. 65997-17-3)	TLV	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Glass, Oxides, Chemicals (CAS No. 65997-17-3)	REL (TWA)	TWA 3 fibers/cm ³ (fibers ≤ 3.5 μm in diameter & ≥ 10 μm in length) TWA 5 mg/m ³ (total)

Appropriate engineering controls

Individual protection measures, such as personal protective equipment

**Eye/face
protection**



Avoid eye contact. Wear safety glasses with side shields (or goggles).

Skin protection

**Hand
protection**



Wear protective gloves.

Suitable gloves can be recommended by the glove supplier.

Other

Wear suitable protective clothing.

**Respiratory
protection**



Avoid breathing dust. Assess exposure concentrations of all materials involved in the workplace. If concentrations exceed the exposure limits listed in Exposure Guidelines or irritation or other symptoms experienced, follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance

Physical state

Solid

Form

Glass Bead

Colors

Colorless

Odor	Odorless
Odor threshold (ppm)	Not Available
pH	No data available
Melting point/freezing point	Approximately 730 ^o C (1346°F)
Initial boiling point and boiling range	No data available
Flash point	Not combustible
Evaporation rate	No data available
Flammability (solid, gas)	
Flammability limit - lower (%)	No data available
Flammability limit - upper (%)	No data available
Explosive limit - lower (%)	No data available
Explosive limit - upper (%)	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density (Specific gravity)	2.4–2.6
Refractive index	≥1.5
Spherical beads (%)	>70
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Volatile Organic Compounds	No data available

Sieve Analysis		
Type 1	Mesh (Micrometer)	Percent Passing (%)
	1180	100
	850	95-100
	600	75-95
	300	15-35
	150	0-5
Type 2	Mesh (Micrometer)	Percent Passing (%)
	1180	100
	850	90-100
	600	50-75
	425	15-45
	300	0-15
	180	0-5
Type 3	Mesh (Micrometer)	Percent Passing (%)
	1700	100
	1400	95-100
	1180	80-95
	1000	10-40
	850	0-5
	710	0-2
Type 4	Mesh (Micrometer)	Percent Passing (%)
	2000	100
	1700	95-100
	1400	80-95
	1180	10-40
	1000	0-5
	850	0-2

10. Stability and Reactivity

Reactivity	Not generally reactive under normal conditions
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing
Conditions to avoid	No data available
Incompatible materials	Dissolves in hydrofluoric acid.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - silicon oxides Other decomposition products - No data available

11. Toxicological Information

Information on likely routes of exposure

Ingestion	Do not ingest. May cause discomfort if swallowed.
Inhalation	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Particulates may cause irritation to the eyes.

Symptoms related to the physical, chemical & toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Delayed & immediate effects & chronic effects from short-& long-term exposure Causes eye irritation. May cause respiratory irritation.
May cause transient irritation.

Numerical measures of toxicity

Components	Test	Species	Test Results
Glass, Oxides, Chemicals	Oral LD50	Rat	> 2000 mg/kg
(CAS No. 65997-17-3)	Inhalation LC50	Rat	No Data
Skin corrosion/irritation	May be irritating to the skin.		
Serious eye damage/eye irritation	May be irritating to eyes.		
Respiratory or skin sensitization			
Respiratory sensitization	No data available		
Skin sensitization	No data available		
Germ cell mutagenicity	No data available		
Carcinogenicity			
IARC Monographs. Overall Evaluation of Carcinogenicity			
Not classifiable as to carcinogenicity to humans			
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)			
Not Listed			
Reproductive toxicity	No data available		
Specific target organ toxicity -single exposure	Not classified.		
Specific target organ toxicity -repeated exposure	Not classified.		
Aspiration hazard	No data available		

12. Ecological Information

Numerical measures of toxicity

Components	Test	Species	Test Results
Glass, Oxides, Chemicals	Crustacea EC50	Water flea	>1,000 mg/l
(CAS No. 65997-17-3)		(Daphnia magna)	72 Hours

Toxicity	No known reports of ecotoxicity to the environment
Persistence and degradability	Persistent but inert in aquatic systems.
Bioaccumulative potential	The product will not bioaccumulate up the food chain.

Mobility in soil	Sinks in water. Insoluble in water.
Results of PBT and vPvB Assessment	No Data
Other adverse effects	None known

13. Disposal Considerations

Disposal instructions	Disposed material is not a hazardous waste. Disposal should be in accordance with local, state or national legislation.
Hazardous waste code	
US RCRA Hazardous Waste U List	Not Applicable
Contaminated packaging	Container must be disposed of in accordance with local, state and national regulations. Containers must not be punctured or destroyed by burning, even when empty.

14. Transport Information

DOT, IATA, and IMDG	Not regulated as dangerous goods.
UN number	None
Environmental hazards	
Marine pollutant	None
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Spilled material is extremely slippery:

15. Regulatory Information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpart. D)

Not regulated

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

None of the components in this product are regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA Title III Classification:

Hazard categories	Immediate Hazard: No	Pressure Hazard: No
	Delayed Hazard: No	Reactivity Hazard: No
	Fire Hazard: No	

SARA 302 Extremely hazardous substance None of the components in this product are listed. No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 Emergency release notification Not Regulated

SARA 311/312 Hazardous chemical No SARA Hazards

SARA 313 (TRI reporting) This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

No components in this product is listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

No components in this product is listed.

Safe Drinking Water Act (SDWA) No components in this product is listed.

US State regulations

Massachusetts RTK - Substance List

Glass, Oxide, Chemicals (CAS 65997-17-3)

New Jersey Worker and Community Right-to-Know Act

Glass, Oxide, Chemicals (CAS 65997-17-3)

Pennsylvania Worker and Community Right-to-Know Law

Glass, oxide, Chemicals, non-fibrous, CAS No. 65997-17-3

US. California Proposition 65

Carcinogens & Reproductive Toxicity (CRT): This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Substance List

Canada regulations

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR).

WHMIS Classifications of Substances: Not Listed

Canada (DSL/NDSL): Not Listed

Canada Ingredient Disclosure List (CIDL) Not Listed

Canada 2004 / 2005 NPRI (National Not Listed

Pollutant Release Inventory):

Canada CEPA - Greenhouse Gases Not Listed

Subject to Mandatory Reporting

Canada - CEPA - Priority Substances List Not Listed

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemical List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information, Including Date of Preparation or Last Revision

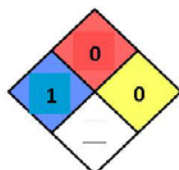
Issue date 07-09-2019

Revision date

Version # 1

NFPA 704

Ratings



Color-Code

Health Hazard (Blue)
Flammability (Red)
Health Hazard (Yellow)
Special Hazards (White)

Numeric Scale

4-Severe Hazard
3-Serious Hazard
2-Moderate Hazard
1-Slight Hazard
0-Minimal Hazard

References

ACGIH: Documentation of the Threshold Limit Values and Biological Exposure indices
ECHA: European Chemicals Agency
HSDB: Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
NIOSH: The National Institute for Occupational Safety and Health
NTP: National Toxicology Program
NLM: Hazardous Substances Data Base
OECD : Organization for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration

Disclaimer

Disclaimer: The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Because of conditions of use are beyond our control, no guarantee, representation or warranty expressed or implied is made. We urge each customer or recipient of this SDS to study it carefully to become aware of and understand the potential hazards associated with the product. Customary precautionary measures for handling chemicals should be followed. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. Since conditions for use of this product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Any use of the product not in conformance with this SDS or in combination with any other product or process is the responsibility of the user. Consult Ozark Materials, LLC for further information.



TECHNICAL DATA SHEET

OZARK MATERIALS, LLC ROADMARKING GLASS BEADS (TYPE 1, 2, 3, 4)

PRODUCT DESCRIPTION

Ozark Materials, LLC Glass Beads are superior quality dropon spheres used to produce high visibility through retroreflectivity of the roadmarking. These beads are clear, durable, and consistent gradation and roundness to provide the performance of today's requirements for the driving public. All glass bead classes meet their respective requirements according to AASHTO M 247 for Type 1, 2, 3, and 4.

ADVANTAGES

- **Meets or exceeds all requirements of the latest edition of AASHTO M 247 Specification**
- **Superior Roundness to provide exceptional reflectivity**
- **High clarity and color to allow more light to refract back to the driver**
- **Properly coated to promote adhesion and floatation of the glass beads with the marking, and to provide longer visible life of the marking**
- **No moisture content allowing beads to flow through your equipment process**
- **Can be applied with gravity or air pressure equipment**

SPECIFICATIONS

AASHTO M 247 Type 1, 2, 3, 4 (latest edition). Able to meet any modifications to AASHTO M 247.

PACKAGING

Available in 50 lb. bags or 2,000 lb. tri-wall containers. Keep bags and beads away from precipitation and standing water.

PREPARATION

Most state entities dictate the gradation size of the bead, roundness, and coating to use. Many performance specifications allow the contractor to choose among various gradation sizes. It is important to understand the desired performance and which bead will provide that reflectivity. Below is a guide to use when attempting to match these glass beads with the desired performance:



APPLICATION

Desired Initial Reflectivity (mcd)	White AASHTO M 249 Thermoplastic	Yellow AASHTO M 249 Thermoplastic	White Waterborne Paint	Yellow Waterborne Paint
Type 1 (10 lbs./100 ft ²)	300	200	300	200
Type 2 (10 lbs./100 ft ²)	350	250	350	250

Double Drop: Type 3 (10 lbs./100 ft ²) Type 1 (6 lbs./100 ft ²)	400+	300+	400+	300+
Double Drop: Type 4 (10 lbs./100 ft ²) Type 1 (6 lbs./100 ft ²)	400+	300+	400+	300+

TECHNICAL DETAILS

Typical Results (modified for various State requirements)

	Type 1	Type 2	Type 3	Type 4
Overall Roundness (%)	>70	>70	>80	>80
(Typical Roundness, %)	>80	>80	>90	>90
Refractive Index	1.50-1.55	1.50-1.55	1.50-1.55	1.50-1.55
Specific Gravity (g/cm ³)	2.4-2.6	2.4-2.6	2.4-2.6	2.4-2.6
Adhesion Coating (Silane)	✓	✓	✓	✓
Floatation/Moisture Coating (Silicone)	✓	✓	✓	✓
Adhesion Coating (Silane)	✓	✓	✓	✓
Heavy Metals (lead, arsenic, antimony)	<200 ppm	<200 ppm	<200 ppm	<200 ppm

Warranty

Ozark Materials, LLC warrants to the purchaser that these products shall be manufactured without defects. This limited warranty covers replacement material only. The shelf life shall be 1 year from the date of manufacture when stored properly. Excluded from coverage is labor, any damage to the application surface, or any failure of the coating caused other than by defects in the material.

STATEMENT OF RIGHT TO FURTHER ADMINISTRATIVE REVIEW

Protest Appeal Notice (Revised June 2019)

The South Carolina Procurement Code, in Section 11-35-4210, subsection 6, states:

(6) Finality of Decision. A decision pursuant to subsection (4) is final and conclusive, unless fraudulent or unless a person adversely affected by the decision requests a further administrative review by the Procurement Review Panel pursuant to Section 11-35-4410(1) within ten days of posting of the decision in accordance with subsection (5). The request for review must be directed to the appropriate chief procurement officer, who shall forward the request to the panel or to the Procurement Review Panel, and must be in writing, setting forth the reasons for disagreement with the decision of the appropriate chief procurement officer. The person also may request a hearing before the Procurement Review Panel. The appropriate chief procurement officer and an affected governmental body shall have the opportunity to participate fully in a later review or appeal, administrative or judicial.

Copies of the Panel's decisions and other additional information regarding the protest process is available on the internet at the following web site: <http://procurement.sc.gov>

FILING FEE: Pursuant to Proviso 111.1 of the 2019 General Appropriations Act, "[r]equests for administrative review before the South Carolina Procurement Review Panel shall be accompanied by a filing fee of two hundred and fifty dollars (\$250.00), payable to the SC Procurement Review Panel. The panel is authorized to charge the party requesting an administrative review under the South Carolina Code Sections 11-35-4210(6), 11-35-4220(5), 11-35-4230(6) and/or 11-35-4410...Withdrawal of an appeal will result in the filing fee being forfeited to the panel. If a party desiring to file an appeal is unable to pay the filing fee because of financial hardship, the party shall submit a completed Request for Filing Fee Waiver form at the same time the request for review is filed. *[The Request for Filing Fee Waiver form is attached to this Decision.]* If the filing fee is not waived, the party must pay the filing fee within fifteen days of the date of receipt of the order denying waiver of the filing fee. Requests for administrative review will not be accepted unless accompanied by the filing fee or a completed Request for Filing Fee Waiver form at the time of filing." PLEASE MAKE YOUR CHECK PAYABLE TO THE "SC PROCUREMENT REVIEW PANEL."

LEGAL REPRESENTATION: In order to prosecute an appeal before the Panel, business entities organized and registered as corporations, limited liability companies, and limited partnerships must be represented by a lawyer. Failure to obtain counsel will result in dismissal of your appeal. *Protest of Lighting Services*, Case No. 2002-10 (Proc. Rev. Panel Nov. 6, 2002) and *Protest of The Kardon Corporation*, Case No. 2002-13 (Proc. Rev. Panel Jan. 31, 2003); and *Protest of PC&C Enterprises, LLC*, Case No. 2012-1 (Proc. Rev. Panel April 2, 2012). However, individuals and those operating as an individual doing business under a trade name may proceed without counsel, if desired.

**South Carolina Procurement Review Panel
Request for Filing Fee Waiver
1205 Pendleton Street, Suite 367, Columbia, SC 29201**

Name of Requestor

Address

City

State

Zip

Business Phone

-
1. What is your/your company's monthly income? _____
 2. What are your/your company's monthly expenses? _____
 3. List any other circumstances which you think affect your/your company's ability to pay the filing fee:

To the best of my knowledge, the information above is true and accurate. I have made no attempt to misrepresent my/my company's financial condition. I hereby request that the filing fee for requesting administrative review be waived.

Sworn to before me this
_____ day of _____, 20_____

Notary Public of South Carolina

Requestor/Appellant

My Commission expires: _____

For official use only: _____ Fee Waived _____ Waiver Denied

Chairman or Vice Chairman, SC Procurement Review Panel

This _____ day of _____, 20_____
Columbia, South Carolina

NOTE: If your filing fee request is denied, you will be expected to pay the filing fee within fifteen (15) days of the date of receipt of the order denying the waiver.