

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION

**Product Identifier**

**Trade Name:** Cenospheres  
**Synonyms:** Aluminosilicate Microsphere

**Relevant Identified Uses of the Substance or Mixture and Uses Advised Against**

**Product Use:** Lightweight high-temperature resistant filler

**Details of the Supplier of the Safety Data Sheet**

**Manufacturer:** Riverside Specialty Chemicals Inc.  
316 West 79<sup>th</sup> Street, Suite 7W  
New York, NY 10024

**Information Phone Number:** 212-769-3440  
**E-mail:** info@riverchem.com

**Emergency Telephone Number**

**Emergency Spill Information:** PERS Domestic Call: 1-800-633-8253 (24 hrs.)  
PERS International Call Collect: +1-801-629-0667 (24 hrs.)  
Emergency Phone: 800-424-9300

**SDS Date of Preparation:** July 16, 2020

### SECTION 2: HAZARD(S) IDENTIFICATION

*This product as sold is inert, hollow spheres consisting of silica and alumina. No toxicological hazards exist due to all crystalline material being incased in the glass-like shell. The classification below only applies if the product is crushed or machined and breathable dust particles are formed.*

**Classification:**

Carcinogen Category 1A  
Specific Target Organ Toxicity Repeated Exposure Category 1

**Label Elements**

Danger!

**Hazard Statements:**

May cause cancer by inhalation.  
Causes damage to lungs through prolonged or repeated exposure by inhalation.

**Precautionary Statements:**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust.

Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves and eye protection.  
IF exposed or concerned: Get medical attention.  
Store locked up.  
Dispose of contents and container safely in accordance with all local and national regulations.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Ashes (residues), cenospheres	93924-19-7	95-100%
Crystalline Silica (quartz)	14808-60-7	<2%
Titanium Dioxide	13463-67-7	<2%

### SECTION 4: FIRST-AID MEASURES

#### Description of First Aid Measures:

**Eye:** Rinse thoroughly with water. Do not rub eyes. Get medical attention if irritation occurs and persists.

**Skin:** Flush thoroughly with water. Get medical attention if irritation or symptoms of exposure develop. Remove and launder contaminated clothing before re-use.

**Inhalation:** If dust is inhaled: remove exposed person from source of exposure to fresh air. Get medical attention if symptoms persist.

**Ingestion:** Do not induce vomiting. Rinse the mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

#### Most Important symptoms and effects, both acute and delayed:

Contact with dust may cause mechanical eye and skin irritation. Particles may cause abrasive eye injury. Inhalation of dust may cause respiratory tract irritation. Titanium Dioxide is suspected of causing cancer by inhalation. Prolonged inhalation of respirable crystalline silica may cause lung disease (silicosis) and increase the risk of lung cancer. Risk of cancer depends on duration and level of exposure.

#### Indication of any immediate medical attention and special treatment needed:

Immediate medical attention is required if swallowed.

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media:

Use extinguishing media appropriate for surrounding fire.

#### Special Hazards Arising from the Substance or Mixture:

This product is not classified as flammable or combustible. Thermal decomposition may include oxides of aluminum and silicon, and other metal compounds.

#### Special Protective Equipment and Precautions for Fire-Fighting:

Firefighting should be conducted from a safe distance. Exposed firefighters should wear self-contained breathing apparatus and full protective clothing.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate protective clothing and equipment (see section 8). Avoid eyes contact with dust or airborne particles. Avoid generating airborne dust during clean-up. Avoiding breathing dust.

**Environmental Precautions:**

Report spills and releases as required to appropriate authorities.

**Methods and Material for Containment and Cleaning Up:**

Pick up material and place into a suitable container for disposal. If dust is generated, sweep or scoop up using methods that minimize the generation of airborne dust. Wet before sweeping. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air.). Use water spraying/flushing or ventilated/HEPA filtered vacuum cleaning system. Dispose of in closed containers.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:**

Avoid generating and breathing dusts. Avoid contact with eyes, on skin or clothing. Use with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Remove contaminated clothing and wash it before re-use.

Empty containers retain product residues. Follow all SDS precautions in handling empty containers.

**Conditions for Safe Storage, Including any Incompatibilities:**

Store in a cool, dry, well-ventilated area away from incompatible materials such as acids. Keep containers closed when not in use. Do not store at temperatures below 0°C (32°F)

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

**Control Parameters:**

Component	Exposure Limit
Ashes (residues), cenospheres (as PNOC)	5 mg/m3 (Respirable fraction), 15 mg/m3 (Total dust)TWA OSHA PEL
Crystalline Silica (quartz)	0.05 mg/m3 TWA (respirable dust) OSHA PEL 0.025 mg/m3 TWA (respirable dust) ACGIH TLV
Titanium Dioxide	10 mg/m3 TWA ACGIH TLV 15 mg/m3 TWA OSHA PEL (total dust)

**Exposure Controls:**

**Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

**Eye Protection:** Wear safety glasses with side shields or dust proof goggles to avoid eye contact.

**Skin Protection:** Wear appropriate protective gloves if needed to avoid skin contact.

**Respiratory Protection:** If ventilation is inadequate, an approved dust/mist respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Protective Clothing:** Wear appropriate protective clothing as needed to avoid skin contact, and prevent contamination of personal clothing.

**Work Hygienic Practices:** Remove contaminated clothing and laundry or dispose in an approved waste disposal facility. Wash hands with soap and water after handling product or clothing containing residual.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic Physical and Chemical Properties:

<b>Appearance:</b> Grey, light grey, white or light brown solid, hollow spheres	<b>Odor:</b> A slightly earthy odor
<b>Odor Threshold:</b> Not determined	<b>Physical State:</b> solid
<b>Boiling Point:</b> Not applicable	<b>Relative Density:</b> 0.35-0.85 g/cm <sup>3</sup>
<b>Melting/Freezing Point:</b> 1200-1400°C (2192-2552°F)	<b>% Volatile:</b> Not applicable
<b>Vapor Pressure:</b> Not applicable	<b>Evaporation Rate (Water=1):</b> Not applicable
<b>Vapor Density(Air=1):</b> Not applicable	<b>Viscosity:</b> Not applicable
<b>% Solubility in Water:</b> Insoluble	<b>Octanol/Water Partition Coefficient:</b> Not applicable
<b>Flashpoint:</b> Not applicable	<b>Autoignition Temperature:</b> Not applicable
<b>Lower Flammability Limit:</b> Not applicable	<b>Upper Flammability Limit:</b> Not applicable
<b>Decomposition Temperature:</b> Not determined	<b>pH:</b> Not applicable
<b>Flammability (solid, gas):</b> Not applicable	<b>Explosive Properties:</b> None
<b>Oxidizing Properties:</b> Not applicable	

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity:

Not reactive

### Chemical Stability:

Stable under normal storage and handling conditions

### Possibility of Hazardous Reactions:

This product might react with hydrofluoric acid and produce a corrosive gas, silicon tetrafluoride.

### Conditions to Avoid:

Avoid generation of dust in handling and use.

### Incompatible Materials:

Hydrofluoric acid

### Hazardous Decomposition Products:

Thermal decomposition will produce oxides of aluminum and silicon, and other metal compounds.

## 11. TOXICOLOGICAL DATA

### Information on Toxicological Effects:

#### Potential Health Effects:

**Eye Contact:** Contact with dust may cause mechanical (abrasive) irritation.

**Skin Contact:** No adverse effects are expected.

**Inhalation:** Dust may cause irritation to nose, throat, and upper respiratory tract.

**Ingestion:** Swallowing may cause mouth, throat, and gastrointestinal irritation with nausea and vomiting.

**Chronic Effects:** Excessive inhalation of respirable crystalline silica dust may cause a progressive, disabling and sometimes fatal lung disease called silicosis. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function.

**Acute Toxicity Data:**

Ashes (residues), cenospheres: Oral rat LD50: >2000 mg/kg, Inhalation rat LC50: >1.4 mg/L/4hr (no mortality)  
Crystalline Silica (quartz): Oral rat LD50: >22,500 mg/kg  
Titanium Dioxide: Oral rat LD50: > 5000 mg/kg, Inhalation rat LC50: > 6.82 mg/L

**Sensitization:** This product is not a sensitizer.

**Carcinogen Status:** Titanium Dioxide is listed by IARC as Possibly Carcinogenic to Humans (Group 2B). Respirable crystalline silica quartz is listed as "Carcinogenic to Humans" (Group 1) by IARC and "Known to be a Human Carcinogen" by NTP. None of the other components of this product above 0.1% are listed as carcinogens or suspected carcinogens by IARC, NTP, or OSHA.

**Mutagenicity:** None of the components have been shown to cause mutagenic activity.

**Toxicity for Reproduction:** No data available. No adverse effects expected

**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity:** Crystalline Silica (quartz): 72 hr LC50 carp >10,000 mg/L  
Titanium Dioxide: 48 hr LC50 Leuciscus idus: >1000 mg/L

Product is not expected to cause environmental harm.

**Persistence and Degradability:** Biodegradation is not applicable to inorganic compounds.

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Results of PBT and vPvB Assessment:** Does not meet the criteria of PBT or vPvB.

**Other Adverse Effects:** Not known.

**SECTION 13: DISPOSAL INFORMATION**

**Waste Treatment Methods:**

**Disposal Method:** Dispose in accordance with all local, state and federal regulations.

**SECTION 14: TRANSPORT INFORMATION**

	UN Number	UN Proper Shipping Name	Transport Hazard Class(s)	Packing Group	Environmental Hazards
US DOT	None	Not Regulated	None	None	No
IMDG	None	Not Regulated	None	None	No
ICAO/IATA	None	Not Regulated	None	None	No

**Special Precautions for User:**

None

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:**

Not applicable

**SECTION 15: REGULATORY INFORMATION**

**Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:**

**U.S. Federal Regulations**

**Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):**

This material, as supplied, contains no hazardous substances regulated under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302), or any extremely hazardous substances regulated under the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355), and thus a release of this material as supplied has no reporting requirements under these regulations. There may be additional specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**Toxic Substances Control Act (TSCA):** Listed on the TSCA inventory or exempt.

**Superfund Amendments and Reauthorization Act (SARA) Title III Information:**

**SARA 311/312 (40 CFR 370):** Refer to Section 2 for the OSHA Hazard Classification.

**This product contains the following toxic chemical(s) subject to reporting requirements of SARA Section 313 (40 CFR 372):** None

**State Regulations**

**California:** This product can expose you to chemicals including crystalline silica (quartz) and Titanium Dioxide, which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov). \*

**\*Note:** The crystalline silica (quartz) and Titanium Dioxide in this product are incased in the glass-like shell. Regulation applies if dust is created and the crystalline silica (quartz) and Titanium Dioxide are airborne and particles of respirable size are formed.

**16. OTHER INFORMATION**

**HMIS Ratings:**

**Health: 1\***

**Flammability: 0**

**Physical Hazard: 0**

**SDS Date of Preparation/Revision:** July 16, 2020

**Replaces SDS Dated:** N/A

**Revision Summary:** New SDS

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