# Vibrocast 70-15 SCPC

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 3/15/2015 Revision date: 10/7/2025 Supersedes: 11/23/2022

## SECTION 1 Identification

### 1.1. Product identifier

Product form : Mixture
Product name : Vibrocast 70-15 SCPC
CAS-No. : Mixture
Product code : 0492

### 1.2. Other means of identification

Other means of identification : Alumina-Silicate Cement Bonded Castable

### 1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Refractory
Recommended use : Industrial use

### 1.4. Supplier's details

RHI Magnesita
425 South Salem Church Road
York, PA, 17408
United States
T 717-792-3611
Resco_SDS.TDS@rhimagnesita.com - WWW.RescoProducts.com

### 1.5. Emergency phone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

## SECTION 2 Hazard Identification

### 2.1. Classification of the substance or mixture

**GHS US classification**

| | | |
|---|---|---|
| Skin corrosion/irritation, Category 2 | H315 | Causes skin irritation. |
| Serious eye damage/eye irritation, Category 2B | H320 | Causes eye irritation. |
| Carcinogenicity, Category 1A | H350 | May cause cancer (Inhalation). |

Full text of H statements : see section 16

### 2.2. Label elements

**GHS US labeling**

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H315 - Causes skin irritation
H320 - Causes eye irritation
H350 - May cause cancer (Inhalation).
Precautionary statements (GHS US) : P280 - Wear eye protection, Dust respirator, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P260 - Do not breathe dust.

### 2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

### 2.4. Hazards not otherwise classified

No additional information available

### 2.5. Unknown acute toxicity

No additional information available

## SECTION 3 Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| aluminium oxide, non-fibrous | CAS-No.: 1344-28-1 | 30 – 60 | Not classified |

| Name | Product identifier | % | GHS US classification |
|---|---|---|---|
| silicon carbide | CAS-No.: 409-21-2 | 10 – 30 | Carc. 1B, H350 |
| Calcium Aluminate Cement | CAS-No.: 65997-16-2 | 5 – 10 | Skin Irrit. 2, H315<br>Eye Irrit. 2B, H320 |
| cristobalite | CAS-No.: 14464-46-1 | 0.1 – 0.5 | Carc. 1A, H350 |

Full text of hazard classes and H-statements : see section 16

## SECTION 4 First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Gently wash with plenty of soap and water.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms/effects, acute and delayed

Potential Adverse human health effects and symptoms : Danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes eye irritation.

### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : In case of fire, all extinguishing media allowed.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire with normal precautions from a reasonable distance. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6 Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

Emergency procedures : Do not breathe dust. Avoid contact with skin and eyes.

**For emergency responders**

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area. On land, sweep or shovel into suitable containers.

Environmental precautions : Prevent entry to sewers and public waters.

### 6.2. Methods and materials for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust.

See Heading 8,Exposure controls and personal protection

## SECTION 7 Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Avoid raising dust. Avoid contact with skin and eyes. Do not breathe dust.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store this product in a dry location where it can be protected from the elements.

Incompatible products : Strong bases. Strong acids.

## SECTION 8 Exposure controls/personal protection

### 8.1. Control parameters

| cristobalite (14464-46-1) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH® TLV® TWA | 0.025 mg/m³ respirable dust |
| **USA - OSHA - Occupational Exposure Limits** | |
| OSHA PEL TWA | 0.05 mg/m³ respirable dust |

| silicon carbide (409-21-2) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH® TLV® TWA | 3 mg/m³ (Silicon carbide, nonfibrous; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica. |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| **USA - ACGIH - Occupational Exposure Limits** | |
| ACGIH® TLV® TWA | 1 mg/m³ respirable dust |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate ventilation to minimize dust concentrations.

### 8.3. Individual protection measures, such as personal protective equipment

**Personal protective equipment:**
Avoid all unnecessary exposure.

**Hand protection:**

Wear protective gloves.

**Eye protection:**

Chemical goggles or safety glasses

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Wear appropriate mask

**Other information:**
Do not eat, drink or smoke during use.

## SECTION 9 Physical and chemical properties

### 9.1. Basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Solid |
| Appearance | : | Granular mixture. |
| Color | : | Gray |
| Odor | : | earthy |
| Odor threshold | : | No data available |
| pH | : | ≈ 10.5 |
| pH solution concentration | : | 10 % (individual concentrations) |
| Melting point | : | > 2500 °F |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Critical temperature | : | Not applicable |
| Flash point | : | No data available |
| Flammability (solid, gas) | : | Not flammable. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20°C | : | No data available |
| Relative density | : | ≈ 2.7 |
| Solubility | : | Slightly soluble. |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity, kinematic | : | No data available |
| Explosion limits | : | No data available |
| Particle characteristics | : | No data available |

### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

## SECTION 10 Stability and reactivity

### 10.1. Reactivity

Hydraulic setting.

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Avoid dust formation.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11 Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| silicon carbide (409-21-2) | |
|---|---|
| LD50 oral rat | > 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rat | > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| LD50 oral rat | > 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LC50 Inhalation - Rat | > 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s)) |

Skin corrosion/irritation : Causes skin irritation.
pH: ≈ 10.5

| Calcium Aluminate Cement (65997-16-2) | |
|---|---|
| pH | ≤ 13 |

| cristobalite (14464-46-1) | |
|---|---|
| pH | 6 – 7 |

| silicon carbide (409-21-2) | |
|---|---|
| pH | Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| pH | 9 – 10.5 (aqueous suspension, 33 %) |

Serious eye damage/irritation : Causes eye irritation.
pH: ≈ 10.5

| Calcium Aluminate Cement (65997-16-2) | |
|---|---|
| pH | ≤ 13 |

| cristobalite (14464-46-1) | |
|---|---|
| pH | 6 – 7 |

| silicon carbide (409-21-2) | |
|---|---|
| pH | Not applicable (non-soluble in water), CIPAC MT 75: Determination of pH |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| pH | 9 – 10.5 (aqueous suspension, 33 %) |

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : May cause cancer (Inhalation).

| silicon carbide (409-21-2) | |
|---|---|
| IARC group | 2A - Probably carcinogenic to humans |

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

| silicon carbide (409-21-2) | |
|---|---|
| Viscosity, kinematic | Not applicable (solid) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| Viscosity, kinematic | Not applicable (solid) |

Potential Adverse human health effects and symptoms : Danger of serious damage to health by prolonged exposure through inhalation.
Symptoms/effects after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.
Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes eye irritation.

## SECTION 12 Ecological information

### 12.1. Ecotoxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

| silicon carbide (409-21-2) | |
|---|---|
| ErC50 algae | > 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 48 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| LC50 - Fish [1] | > 100 mg/l (96 h, Salmo trutta, Literature study) |
| EC50 - Crustacea [1] | > 100 mg/l (48 h, Daphnia magna, Literature study) |

### 12.2. Persistence and degradability

| Vibrocast 70-15 SCPC (Mixture) | |
|---|---|
| Persistence and degradability | Not established. |

| Calcium Aluminate Cement (65997-16-2) | |
|---|---|
| Persistence and degradability | Rapidly degradable |

| cristobalite (14464-46-1) | |
|---|---|
| Persistence and degradability | Mineral, Not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |

| silicon carbide (409-21-2) | |
|---|---|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| Persistence and degradability | Not applicable. |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |

### 12.3. Bioaccumulative potential

| Vibrocast 70-15 SCPC (Mixture) | |
|---|---|
| Bioaccumulative potential | Not established. |

| cristobalite (14464-46-1) | |
|---|---|
| Bioaccumulative potential | No data available. |

| silicon carbide (409-21-2) | |
|---|---|
| Bioaccumulative potential | Not bioaccumulative. |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| Bioaccumulative potential | No data available. |

### 12.4. Mobility in soil

| cristobalite (14464-46-1) | |
|---|---|
| Ecology - soil | No data available. |

| silicon carbide (409-21-2) | |
|---|---|
| Surface tension | No data available in the literature |
| Ecology - soil | Low potential for adsorption in soil. |

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| Surface tension | Not applicable (water solubility < 1 mg/l) |
| Ecology - soil | No data available. |

### 12.5. Other adverse effects

Ozone : Not classified
Effect on the global warming : None known
Fluorinated greenhouse gases : No
Other information : No other effects known.

## SECTION 13 Disposal considerations

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.

## SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

**Department of Transportation (DOT)**

In accordance with DOT
Not regulated

**Transportation of Dangerous Goods**

Not regulated

**Transport by sea**

Not regulated

**Air transport**

Not regulated

## SECTION 15 Regulatory information

### 15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

| aluminium oxide, non-fibrous (1344-28-1) | |
|---|---|
| Not subject to reporting requirements of the United States SARA Section 313 | |
| Note | Note: The section 313 chemical list contains "CAS # 1344-28-1 Aluminum Oxide (Fibrous forms)"; the Aluminum oxide contained in this product is non-fibrous, and thus is not a section 313 material. Only manufacturing, processing, or otherwise use of aluminum oxide in the fibrous form triggers reporting. |

## 15.2. International regulations

**CANADA**

| Calcium Aluminate Cement (65997-16-2) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| cristobalite (14464-46-1) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| silicon carbide (409-21-2) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

| aluminium oxide, non-fibrous (1344-28-1) |
|---|
| Listed on the Canadian DSL (Domestic Substances List) |

**EU-Regulations**

No additional information available

**National regulations**

| silicon carbide (409-21-2) |
|---|
| Listed on IARC (International Agency for Research on Cancer) |

## 15.3. State regulations

| Vibrocast 70-15 SCPC (Mixture) | |
|---|---|
| U.S. - California - Proposition 65 - Other information | This product contains crystalline silica, a chemical known to the state of California to cause cancer. For more information go to WWW.P65Warnings.ca.gov |

| cristobalite (14464-46-1) | | | | | |
|---|---|---|---|---|---|
| U.S. - California - Proposition 65 - Carcinogens List | U.S. - California - Proposition 65 - Developmental Toxicity | U.S. - California - Proposition 65 - Reproductive Toxicity - Female | U.S. - California - Proposition 65 - Reproductive Toxicity - Male | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
| Yes | No | No | No | | |

| Component | State or local regulations |
|---|---|
| cristobalite(14464-46-1) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |
| silicon carbide(409-21-2) | U.S. - New Jersey - Right to Know Hazardous Substance List |
| aluminium oxide, non-fibrous(1344-28-1) | U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List |

## SECTION 16 Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 10/7/2025

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Other information : Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail.

| Full text of hazard classes and H-statements | |
|---|---|
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H350 | May cause cancer. |

Safety Data Sheet (SDS), USA

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, RHI Magnesita makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.