

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 12/02/2016 Revision date: 12/02/2016 Supersedes: 05/20/2016

SECTION 1: Identification

Identification 1.1.

Product form Mixtures

Product name Pacocast 28 LI Coarse

CAS No Mixture Product code 0470

Other means of identification Alumina-Silicate Cement Bonded Castable

Recommended use and restrictions on use 1.2. Use of the substance/mixture : Refractory

1.3. **Supplier** Resco Products, Inc.

One Robinson Plaza, Suite 300

6600 Steubenville Pike Pittsburgh, PA 15205 - United States

412-494-4491

SDS@RescoProducts.com - WWW.RescoProducts.com

Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300

Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation H315 Causes skin irritation

Category 2 Serious eye damage/eye

H320 Causes eye irritation

irritation Category 2B

Carcinogenicity Category H350 May cause cancer (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

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/attention P337+P313 - If eye irritation persists: Get medical advice/attention

P260 - Do not breathe dust

Other hazards which do not result in classification 2.3.

No additional information available

Unknown acute toxicity (GHS US) 2.4.

Not applicable

SECTION 3: Composition/Information on ingredients

Substances

Not applicable

3.2. **Mixtures**

| Name Product identifier % GHS-US classification | | | GUS-US classification | |
|---|-----------------------------|---------|------------------------|--|
| Name | Froductidentine | /0 | Grio-03 ciassification | |
| Calcium Aluminate Cement | (CAS No) 65997-16-2 10 - 20 | | Skin Irrit. 2, H315 | |
| | | | Eye Irrit. 2B, H320 | |
| quartz | (CAS No) 14808-60-7 | 10 - 20 | Carc. 1A, H350 | |
| cristobalite | (CAS No) 14464-46-1 | 10 - 20 | Carc. 1A, H350 | |

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

SECTION 4: First-aid measures

Description of 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).

12/02/2016 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse.

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 and effects (acute and delayed)

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

through inhalation.
Causes skin irritation.

Symptoms/injuries after eye contact : Causes eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/injuries after skin contact

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 : No unsuitable extinguishing media known.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable.
Reactivity : Hydraulic setting.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. 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

6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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 any 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

| Calcium Aluminate Cement | Calcium Aluminate Cement (65997-16-2) | | |
|---------------------------|---------------------------------------|--|--|
| Not applicable | Not applicable | | |
| cristobalite (14464-46-1) | | | |
| ACGIH | ACGIH TWA (mg/m³) | 0.025 mg/m³ respirable dust | |
| OSHA | OSHA PEL (TWA) (mg/m³) | 0.05 mg/m³ respirable dust | |
| quartz (14808-60-7) | | | |
| ACGIH | ACGIH TWA (mg/m³) | 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction) | |
| OSHA | OSHA PEL (TWA) (mg/m³) | 0.05 mg/m³ Respirable fraction | |

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/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:

12/02/2016 EN (English US) 2/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Granular mixture.
Color : light brown
Odor : Earthy Odor
Odor threshold : Not applicable
pH : No data available
Melting point : > 2000 °F

Freezing point : Not applicable : Not applicable Boiling point Critical temperature Not applicable Not applicable Critical pressure Not applicable Flash point Relative evaporation rate (butyl acetate=1) Not applicable Relative evaporation rate (ether=1) Not applicable Flammability (solid, gas) Non flammable. Vapor pressure Not Applicable Vapor pressure at 50 °C Not Applicable Relative vapor density at 20 °C No data available Relative density No data available

Relative density of saturated gas/air mixture : ≈ 1.5

Solubility Slightly soluble. Log Pow : No data available Auto-ignition temperature Not applicable Decomposition temperature : No data available Not Applicable Viscosity Not Applicable Viscosity, kinematic Viscosity, dynamic Not Applicable **Explosion limits** Not applicable Explosive properties No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Hydraulic setting.

10.2. Chemical stability

Not established.

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 : Not classified
Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes eye irritation.
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer (Inhalation).

12/02/2016 EN (English US) 3/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| The second secon |
|--|
| 1 - Carcinogenic to humans |
| |
| 1 - Carcinogenic to humans |
| : Not classified |
| : Not classified |
| : Not classified |
| Matalana Wad |
| Not classifiedBased on available data, the classification criteria are not met. |
| . Dased on available data, the classification chieffa are not met. |
| : May cause cancer by inhalation. Danger of serious damage to health by prolonged exposure |
| through inhalation. |
| : Causes skin irritation. |
| : Causes eye irritation. |
| |
| |
| |
| |
| M. C. C. LE L. L. |
| Not established. |
| |
| Biodegradability: not applicable. |
| Not applicable |
| Not applicable |
| Not applicable |
| 1 Not applicable |
| |
| Biodegradability: not applicable. No (test) data on mobility of the substance available. |
| Not applicable |
| Not applicable |
| Not applicable |
| |
| |
| Not established. |
| THE OCCUPION OF |
| |
| No bioaccumulation data available. |
| |
| No bioaccumulation data available. |
| |
| |
| |
| : No known effects from this product. |
| None known : No known effects from this product. |
| : Avoid release to the environment. |
| S Avoid release to the environment. |
| |
| . Diapose in a cofe manner is accordance with least/actional resulations |
| Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment. |
| |

: Avoid release to the environment.

Ecology - waste materials

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated TDG

Not regulated
Transport by sea
Not regulated
Air transport

Not regulated

12/02/2016 EN (English US) 4/5

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

| Pacocast 28 LI Coarse (Mixture) | cast 28 LI Coarse (Mixture) | | |
|---|--|--|--|
| U.S California - Proposition 65 - Other | This product contains crystalline silica, a chemical known to the state of California to cause | | |
| information | cancer. | | |

| 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 | Non-significant risk level (NSRL) |
| Yes | No | No | No | |
| quartz (14808-60-7) | | | | |
| 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 | Non-significant risk level (NSRL) |
| Yes | No | No | No | |

cristobalite (14464-46-1)

U.S. - New Jersey - Right to Know Hazardous Substance List

quartz (14808-60-7)

U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date : 12/02/2016

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 H-phrases:

| p | |
|-------|------------------------|
| H315 | Causes skin irritation |
| H320 | Causes eye irritation |
| H350 | May cause cancer |

SDS US (GHS HazCom 2012)

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. 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.

12/02/2016 EN (English US) 5/5