1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier

Product Name: PYROCRETE 241
Revision Date: 07/02/2020
Supercedes Date: 05/06/2020

1.2 Relevant identified uses of the substance or mixture and uses advised against

Fireproofing Material

1.3 Details of the supplier of the safety data sheet

Manufacturer: Carboline Company
2150 Schuetz Road
St. Louis, MO USA 63146

Regulatory / Technical Information:
Contact Carboline Technical Services at 1-800-848-4645
Schlereth, Ken - ehs@stoncor.com

Datasheet Produced by: CHEMTREC 1-800-424-9300 (Inside US)
CHEMTREC +1 703 5273887 (Outside US)
HEALTH - Pittsburgh Poison Control 1-412-681-6669

1.4 Emergency telephone number:

2. Hazard Identification

2.1 Classification of the substance or mixture

Carcinogenicity, category 1A
Serious Eye Damage, category 1
STOT, single exposure, category 3, RTI
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product

Signal Word
Danger

Named Chemicals on Label
CALCIUM OXIDE, SODIUM SILICATE, MICA, MICROCRYSTALLINE SILICA, PORTLAND CEMENT

HAZARD STATEMENTS
Skin Irritation, category 2 H315 Causes skin irritation.
Skin Sensitizer, category 1 H317 May cause an allergic skin reaction.
Serious Eye Damage, category 1 H318 Causes serious eye damage.
STOT, single exposure, category 3, RTI H335 May cause respiratory irritation.
Carcinogenicity, category 1A H350-1A May cause cancer.

PRECAUTION PHRASES

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/ face protection.
P284 Wear respiratory protection.
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313 IF exposed or concerned: Get medical advice/attention
P333+313 If skin irritation or rash occurs: Get medical advice/attention.

2.3 Other hazards
No Information

Results of PBT and vPvB assessment:
The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>PORTLAND CEMENT</td>
<td>25 - &lt;50</td>
</tr>
<tr>
<td>12001-26-2</td>
<td>MICA</td>
<td>10 - &lt;25</td>
</tr>
<tr>
<td>1305-78-8</td>
<td>CALCIUM OXIDE</td>
<td>1.0 - &lt;2.5</td>
</tr>
<tr>
<td>1344-09-8</td>
<td>SODIUM SILICATE</td>
<td>1.0 - &lt;2.5</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>MICROCRYSTALLINE SILICA</td>
<td>0.1 - &lt;1.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>GHS Symbols</th>
<th>GHS Hazard Statements</th>
<th>M-Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>GHS05-GHS07</td>
<td>H315-317-318</td>
<td>0</td>
</tr>
<tr>
<td>12001-26-2</td>
<td>GHS07</td>
<td>H319-335</td>
<td>0</td>
</tr>
<tr>
<td>1305-78-8</td>
<td>GHS05-GHS07</td>
<td>H315-318-335</td>
<td>0</td>
</tr>
<tr>
<td>1344-09-8</td>
<td>GHS05-GHS07</td>
<td>H290-314-335</td>
<td>0</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>GHS08</td>
<td>H341-350-372</td>
<td>0</td>
</tr>
</tbody>
</table>

Remarks: CASStatement

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures
AFTER INHALATION: Remove person to fresh air. If signs/symptoms continue, get medical attention.
AFTER SKIN CONTACT: Wash off with soap and plenty of water.
AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
Irritating to respiratory system.
4.3 Indication of any immediate medical attention and special treatment needed

No Information

5. Fire-fighting Measures

5.1 Extinguishing Media:

None Known

UNUSUAL FIRE AND EXPLOSION HAZARDS: No Information

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

The product is not flammable.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Sweep up to prevent slipping hazard. Forms slippery/greasy layers with water.

6.2 Environmental precautions

No Information

6.3 Methods and material for containment and cleaning up

No Information

6.4 Reference to other sections

No Information

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Avoid breathing dust. Do not breathe vapours or spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

PROTECTION AND HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust. Wash hands before eating, drinking, or smoking.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Exposure to moisture.

STORAGE CONDITIONS: Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3 Specific end use(s)

No Information

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS-No.</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>ACGIH Ceiling</th>
</tr>
</thead>
<tbody>
<tr>
<td>PORTLAND CEMENT</td>
<td>65997-15-1</td>
<td>1 MGM3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>MICA</td>
<td>12001-26-2</td>
<td>3 MGM3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>CALCIUM OXIDE</td>
<td>1305-78-8</td>
<td>2 MGM3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>SODIUM SILICATE</td>
<td>1344-09-8</td>
<td>N/E</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>MICROCRYSTALLINE SILICA</td>
<td>14808-60-7</td>
<td>0.025 MGM3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>
Name | CAS-No. | OSHA PEL | OSHA STEL
--- | --- | --- | ---
PORTLAND CEMENT | 65997-15-1 | 5 MGM3 15 MGM3 | N/E
MICA | 12001-26-2 | 20. MPPCF | N/E
CALCIUM OXIDE | 1305-78-8 | 5.0 MG/M3 | N/E
SODIUM SILICATE | 1344-09-8 | N/E | N/E
MICROCRYSTALLINE SILICA | 14808-60-7 | 0.05 MGM3 | N/E

FURTHER INFORMATION: No Information

8.2 Exposure controls

Personal Protection
RESPIRATORY PROTECTION: Effective dust mask. Use NIOSH approved respiratory protection.

EYE PROTECTION: Safety glasses with side-shields.

HAND PROTECTION: For prolonged or repeated contact use protective gloves.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Avoid dust accumulation in enclosed space.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

**Appearance:** Grey, Speckled Powder
**Physical State:** Solid
**Odor:** Dusty
**Odor threshold:** N/D
**pH:** N/D
**Melting point / freezing point (°C):** N/D
**Boiling point/range:** N/A - N/A
**Flash Point:** None
**Evaporation rate:** N/A
**Flammability (solid, gas):** Not determined
**Upper/lower flammability or explosive limits:** N/A - N/A
**Vapour Pressure, mmHg:** N/A
**Vapour density:** N/A
**Relative density:** Not determined
**Solubility in / Miscibility with water:** N/D
**Partition coefficient: n-octanol/water:** Not determined
**Auto-ignition temperature (°C):** Not determined
**Decomposition temperature (°C):** Not determined
**Viscosity:** Unknown
**Explosive properties:** Not determined
**Oxidising properties:** Not determined
9.2 Other information

VOC Content g/l: 0
Specific Gravity (g/cm3): 0.12

10. Stability and Reactivity

10.1 Reactivity
No Information

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerisation does not occur.

10.4 Conditions to avoid
Exposure to moisture.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
None known.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:
- Oral LD50: N/D
- Inhalation LC50: N/D

Irritation: Skin irritation, category 2
Corrosivity: Serious eye damage, category 1
Sensitization: Skin sensitizer, category 1

Repeated dose toxicity: Unknown
Carcinogenicity: Carcinogenicity, category 1A
Mutagenicity: Unknown
Toxicity for reproduction: Unknown

STOT-single exposure: STOT, single exposure, category 3
STOT-repeated exposure: unknown
Aspiration hazard: Unknown

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Vapor LC50</th>
<th>Gas LC50</th>
<th>Dust/Mist LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>PORTLAND CEMENT</td>
<td>Not Available</td>
<td>Not Available</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>12001-26-2</td>
<td>MICA</td>
<td>Not Available</td>
<td>Not Available</td>
<td>0.000</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Additional Information:
The cement contained within this product may cause dermal sensitization due to the potential presence of trace amounts of hexavalent chromium. This product contains silica which is classified by IARC as a known human carcinogen (Group 1). Crystalline silica is known to cause silicosis. The classification(s) is/are relevant when exposed to these respirable substances in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia): Unknown
IC50 72hr (Algae): Unknown
LC50 96hr (fish): Unknown

12.2 Persistence and degradability: Unknown

12.3 Bioaccumulative potential: Unknown

12.4 Mobility in soil: Unknown

12.5 Results of PBT and vPvB assessment:
The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: Unknown

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical Name</th>
<th>EC50 48hr</th>
<th>IC50 72hr</th>
<th>LC50 96hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-15-1</td>
<td>PORTLAND CEMENT</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>12001-26-2</td>
<td>MICA</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>1305-78-8</td>
<td>CALCIUM OXIDE</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>1344-09-8</td>
<td>SODIUM SILICATE</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>MICROCRYSTALLINE SILICA</td>
<td>No information</td>
<td>No information</td>
<td>No information</td>
</tr>
</tbody>
</table>

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of in accordance with local regulations.

14. Transport Information

14.1 UN number: None
14.2 UN proper shipping name: Not Regulated
14.3 Transport hazard class(es): None
14.4 Packing group: N/A
14.5 Environmental hazards: No
14.6 Special precautions for user: Unknown
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Unknown
15. Regulatory Information

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

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- Carcinogenicity
- Skin Corrosion or Irritation
- Respiratory or Skin Sensitization
- Serious eye damage or eye irritation
- Specific target organ toxicity (single or repeated exposure)

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

All components of this product are either listed on the TSCA Inventory or are exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALUMINUM HYDROXIDE</td>
<td>21645-51-2</td>
</tr>
<tr>
<td>VERMICULITE</td>
<td>1318-00-9</td>
</tr>
<tr>
<td>AMORPHOUS SILICATE</td>
<td>93763-70-3</td>
</tr>
</tbody>
</table>

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALUMINUM HYDROXIDE</td>
<td>21645-51-2</td>
</tr>
<tr>
<td>VERMICULITE</td>
<td>1318-00-9</td>
</tr>
<tr>
<td>AMORPHOUS SILICATE</td>
<td>93763-70-3</td>
</tr>
<tr>
<td>LIMESTONE</td>
<td>1317-65-3</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65

WARNING: Cancer and Reproductive Harm -- www.P65Warnings.ca.gov

International Regulations: As follows -

* Canadian DSL:

All chemical ingredients included on inventory (DSL)

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.
16. Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

- **H290**: May be corrosive to metals.
- **H314**: Causes severe skin burns and eye damage.
- **H315**: Causes skin irritation.
- **H317**: May cause an allergic skin reaction.
- **H318**: Causes serious eye damage.
- **H319**: Causes serious eye irritation.
- **H335**: May cause respiratory irritation.
- **H341**: Suspected of causing genetic defects.
- **H350**: May cause cancer.
- **H372**: Causes damage to organs through prolonged or repeated exposure.

**Reasons for revision**

No Information

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.