

### PRODUCT DESCRIPTION

CAFCO 400 AC is a gypsum based, wet mix, medium density Spray-Applied Fire Resistive Material (SFRM) designed to be used with the ISOLATEK QWIK-SET® system. CAFCO 400 AC provides fire protection for structural steel in commercial and high rise construction to interior conditioned areas which may be subjected to higher levels of abuse such as mechanical and electrical rooms or elevator shafts. CAFCO 400 AC offers enhanced strength and durability and meets the current IBC high rise bond strength requirement of  $\geq 430$  psf and 1,000 psf.

In addition to fire resistance, CAFCO 400 AC also provides thermal benefits. As a thermal insulator, it is effective in reducing heat loss, particularly when applied to the underside of a roof deck. The R-value added by CAFCO 400 AC may also allow a reduction in roof insulation.

Combining its fire resistive ratings, thermal insulating properties, and application efficiencies, CAFCO 400 AC is the most innovative, wet mix, medium density SFRM on the market today.

### PRODUCT ADVANTAGES

- Offers the most cost effective fire resistance performance per unit thickness and greatest productivity of any medium density SFRM
- Less material is needed to achieve required fire ratings
- Meets or exceeds industry in-place performance standards
- Provides added value as a thermal insulator
- Cost effective, clean and neat in appearance

### FIRE TEST PERFORMANCE

CAFCO 400 AC has been evaluated for fire resistance and is rated for up to 4 hours for floor assemblies, beams, joists, columns, and roof assemblies.

- Classified by UL in accordance with ANSI/UL 263 (ASTM E119)
- Classified by UL in accordance with CAN/ULC-S101 (ASTM E119)

CAFCO 400 AC has also been tested for surface burning characteristics in accordance with ASTM E84 and is rated Class A.

Flame Spread .....0      Smoke Developed .....0

### CODE COMPLIANCES

CAFCO 400 AC satisfies the requirements of the following:

- IBC® - INTERNATIONAL BUILDING CODE® (ICC ESR-1649)
- City of Los Angeles
- NBC - National Building Code of Canada

### MAJOR SPECIFICATIONS

CAFCO 400 AC complies with the requirements of the following specifications:

- MasterSpec®, Section 078100 APPLIED FIREPROOFING (AIA)
- MasterFormat® 2014, Section 07 81 00 Applied Fireproofing (CSC,CSI)
- Unified Facilities Guide Specification, UFGS 07 81 00 Spray-Applied Fireproofing (USACE, NAVFAC, AFCEC, NASA)
- Master Construction Specifications, Number 07 81 00 Applied Fireproofing (VA)
- Code of Federal Regulations, Title 40 Protection of the Environment (EPA)
- PBS-P100, Facilities Standards for the Public Buildings Services (GSA)

### Thermal Performance

| Product   | Conductivity(k)*   | Resistance (R/inch) |
|-----------|--|---------------------|
| CAFCO 400 | 0.494 BTU in/hr ft <sup>2</sup> °F @ 75°F<br>(0.0712 W/m·K @ 24°C) | 2.02                |

\*When tested in accordance with ASTM C518

### Physical Performance

| Characteristic         | ASTM Method | Standard Performance*                                      | Tested Performance**                              |
|------------------------|-------------|--|---|
| Density                | E605        | 22 pcf (353 kg/m <sup>3</sup> )                            | 22-25 pcf (352-400 kg/m <sup>3</sup> )            |
| Combustibility         | E136        | Noncombustible   | Noncombustible                                    |
| Cohesion/Adhesion      | E736        | 430 psf (20.6 kPa)   | 1,849 psf (88.5 kPa)                              |
| Deflection             | E759        | No Cracks or Delaminations                                 | No Cracks or Delaminations                        |
| Bond Impact            | E760        | No Cracks or Delaminations                                 | No Cracks or Delaminations                        |
| Compressive Strength   | E761        | 7,344 psf (351.7 kPa)                                      | 8,719 psf (417.5 kPa)                             |
| Air Erosion Resistance | E859        | Less than 0.025 g/ft <sup>2</sup> (0.27 g/m <sup>2</sup> ) | 0.000 g/ft <sup>2</sup> (0.000 g/m <sup>2</sup> ) |
| Corrosion Resistance   | E937        | Does Not Promote Corrosion of Steel                        | Does Not Promote Corrosion of Steel               |
| Fungal Resistance      | G21         | No Growth After 28 Days                                    | Passed  |

\* Standard performance based on industry standards and practices. Refer to UL design for density requirement.

\*\* Values represent independent laboratory tests under controlled conditions.

# CAFCO 400 AC Guide Specification

## SECTION 078100 - APPLIED FIREPROOFING

The following is an outline/shot language specification. Complete specifications for Spray-Applied Fire Resistive Materials are available on various media upon request.

### PART 1 - GENERAL

#### 1.1 Work included

- 1.1.1 Provide all labor, materials, equipment and services necessary for, and incidental to, the complete and proper installation of all sprayed fire protection and related work as shown on the drawings or where specified herein, and in accordance with all applicable requirements of the Contract Documents.
- 1.1.2 The material and installation shall conform to the applicable building code requirements of all authorities having jurisdiction.

#### 1.2 Quality Assurance

- 1.2.1 Work shall be performed by a firm with expertise in the installation of fire protection or similar materials. This firm shall be recognized or otherwise approved by the spray-applied fire resistive material manufacturer.
- 1.2.2 Before proceeding with the fire protection work, approval of the proposed material thicknesses and densities shall be obtained from the architect and other applicable authorities having jurisdiction.

#### 1.3 Related Sections

- 1.3.1 SECTION 051200 - STRUCTURAL STEEL FRAMING
- 1.3.2 SECTION 053100 - STEEL DECKING
- 1.3.3 SECTION 072100 - THERMAL INSULATION
- 1.3.4 SECTION 078123 - INTUMESCENT FIREPROOFING
- 1.3.5 SECTION 078443 - JOINT FIRESTOPPING

#### 1.4 References

- A. ASTM E84 - Surface Burning Characteristics of Building Materials.
- B. ASTM E119 - Fire Tests of Building Construction and Materials.
- C. ASTM E605 - Thickness and Density of Sprayed Fire-Resistive Materials Applied to Structural Members.
- D. ASTM E736 - Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members.
- E. ASTM E759 - Effect of Deflection of Sprayed Fire-Resistive Materials Applied to Structural Members.
- F. ASTM E760 - Effect of Impact on Bonding of Sprayed Fire-Resistive Materials Applied to Structural Members.
- G. ASTM E761 - Compressive Strength of Sprayed Fire-Resistive Materials Applied to Structural Members.
- H. ASTM E859 - Air Erosion of Sprayed Fire-Resistive Materials Applied to Structural Members.
- I. ASTM E937 - Corrosion of Steel by Sprayed Fire-Resistive Materials Applied to Structural Members.
- J. CAN / ULC - S101 - Standard Methods of Fire Tests of Building Construction and Materials.
- 1.4.1 Underwriters Laboratories (UL) Fire Resistance Directory.
- 1.4.2 Underwriters Laboratories of Canada (ULC) List of Equipment and Materials.
- 1.4.3 IBC® INTERNATIONAL BUILDING CODE® CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS, Section 1704 Special Inspections.

- 1.4.4 AWC Publication: Technical Manual 12-A Standard Practice for the Testing and Inspection of Field-Applied Sprayed Fire Resistive Materials; an Annotated Guide.

#### 1.5 Submittals

- 1.5.1 Manufacturer's Data: Submit Manufacturer's specification, including certification as may be required to show material compliance with Contract Documents.

- 1.5.2 Test Data: Independent laboratory test results shall be submitted for all specified performance criteria.

#### 1.6 Delivery, Storage and Handling

- 1.6.1 Deliver materials to the project in manufacturer's unopened packages, fully identified as to trade name, type and other identifying data. Packaging shall bear the UL labels for fire hazard and fire-resistance classifications.

- 1.6.2 Store materials above ground, in a dry location, protected from the weather. Damaged packages found unsuitable for use must not be used.

#### 1.7 Project Conditions

- 1.7.1 When the prevailing outdoor temperature at the building is less than 40°F (4°C), a minimum substrate and ambient temperature of 40°F (4°C) shall be maintained prior to, during, and a minimum of 24 hours after application of spray-applied fire resistive material. If necessary for job progress, General Contractor shall provide enclosures and heat to maintain proper temperatures and humidity levels.

- 1.7.2 General Contractor must provide adequate ventilation to allow proper drying of the sprayed fire protection during and subsequent to its application.

- 1.7.2.1 Ventilation must not be less than 4 complete air exchanges per hour until the material is dry. When spraying in enclosed areas such as basements, stairwells, shafts, and small rooms, additional air exchanges may be necessary.

#### 1.8 Sequencing/Scheduling

- 1.8.1 All fire protection work on a floor shall be completed before proceeding to the next floor.

- 1.8.2 The Contractor shall cooperate in the coordination and scheduling of fire protection work to avoid delays in job progress.

### PART 2 - PRODUCTS

#### 2.1 Acceptable Manufacturers

- 2.1.1 The spray-applied fire resistive material shall be manufactured under the CAFCO® brand name, by authorized producers.

#### 2.2 Materials

- 2.2.1 Materials shall be CAFCO 400AC, (UL/ULC designation: Type 400AC) applied to conform to the drawings, specifications and following test criteria.

- 2.2.1.1 Deflection: When tested in accordance with ASTM E759, the material shall not crack or delaminate when the non-concrete topped galvanized deck to which it is applied is subjected to a one time vertical centerload resulting in a downward deflection of 1/120th of the span.

- 2.2.1.2 Bond Impact: When tested in accordance with ASTM E760, the material shall not crack or delaminate from the concrete topped galvanized deck to which it is applied.

- 2.2.1.3 Cohesion/Adhesion (bond strength): When tested in accordance with ASTM E736, the material applied over uncoated or galvanized steel shall have a minimum bond strength of 430 psf (20.6 kPa).

- 2.2.1.4 Air Erosion: When tested in accordance with ASTM E859, the material shall not be subject to losses from the finished application greater than 0.025 grams per sq. ft. (0.27 grams per square meter).

- 2.2.1.5 Compressive Strength: When tested in accordance with ASTM E761, the material shall not deform more than 10 percent when subjected to a crushing force of 7,344 psf (351.7 kPa).

- 2.2.1.6 Corrosion Resistance: When tested in accordance with ASTM E937, the material shall not promote corrosion of steel.

- 2.2.1.7 Surface Burning Characteristics: When tested in accordance with ASTM E84, the material shall exhibit the following surface burning characteristics:

- Flame Spread ..... 0
- Smoke Developed .... 0

- 2.2.1.8 Density: When tested in accordance with ASTM E605, the material shall meet the minimum individual and average density values as listed in the appropriate UL / ULC design or as required by the authority having jurisdiction.

- 2.2.2 The material shall have been tested and classified by Underwriters Laboratories (UL) or Underwriters Laboratories of Canada (ULC) in accordance with the procedures of UL 263 (ASTM E119) or CAN/ULC-S101.

- 2.2.3 Spray-applied fire resistive materials shall be applied at the appropriate minimum thickness and density to achieve the following ratings:

- Floor assemblies \_\_\_\_ hr.
- Roof assemblies \_\_\_\_ hr.
- Beams \_\_\_\_ hr.
- Girders \_\_\_\_ hr.
- Columns \_\_\_\_ hr.
- Joists \_\_\_\_ hr.

- 2.2.4 Potable water shall be used for the application of spray-applied fire resistive materials.

- 2.2.5 Spray-applied fire resistive materials shall contain no detectable asbestos. Material manufacturer shall provide certification of such upon request.

### PART 3 - EXECUTION

#### 3.1 Preparation

- 3.1.1 All surfaces to receive spray-applied fire resistive material shall be free of oil, grease, loose mill scale, dirt, paints/primers or other foreign materials which would impair satisfactory bonding to the surface. Manufacturer shall be contacted for procedures on handling primed/painted steel. Any cleaning of surfaces to receive sprayed fire protection shall be the responsibility of the General Contractor or Steel Erector, as outlined in the structural steel or steel deck section.

- 3.1.2 Clips, hangers, supports, sleeves and other attachments to the substrate are to be placed by others prior to the application of spray-applied fire resistive materials.

- 3.1.3 The installation of ducts, piping, conduit or other suspended equipment shall not take place until the application of spray-applied fire resistive materials is complete in an area.

- 3.1.4 The spray-applied fire resistive material shall only be applied to steel deck which has been fabricated and erected in accordance with the criteria set by the Steel Deck Institute.

- 3.1.5 When roof traffic is anticipated, as in the case of periodic maintenance, roofing pavers shall be installed as a walkway to distribute loads.

#### 3.2 Application

- 3.2.1 Equipment, mixing and application shall be in accordance with the manufacturer's written application instructions.

- 3.2.2 The application of spray-applied fire resistive material shall not commence until certification has been received by the General Contractor that surfaces to receive sprayed fire protection have been inspected by the applicator and are acceptable to receive spray-applied fire resistive material.

- 3.2.3 All unsuitable substrates must be identified by the installer and made known to the General Contractor and corrected prior to application of the spray-applied fire resistive material.

- 3.2.4 Spray-applied fire resistive material shall not be applied to steel floor decks prior to the completion of concrete work on that deck.

- 3.2.5 The application of spray-applied fire resistive material to the underside of roof deck shall not commence until the roofing is completely installed and tight, all penthouses are complete, all mechanical units have been placed, and after construction roof traffic has ceased.

- 3.2.6 Proper temperature and ventilation shall be maintained as specified in 1.7.1, 1.7.2 and 1.7.2.1.

- 3.2.7 Provide masking, drop cloths or other suitable coverings to prevent overspray from coming in contact with surfaces not intended to be sprayed.

- 3.2.8 CAFCO BOND-SEAL (Type EBS) adhesive shall be applied as per the appropriate UL/ULC fire resistance design and manufacturer's written recommendations.

#### 3.3 Repairing and Cleaning

- 3.3.1 All patching of and repair of damaged spray-applied fire resistive material, shall be performed under this section and paid for by the trade responsible for the damage.

- 3.3.2 After the completion of the work in this section, equipment shall be removed and all surfaces not to be sprayed shall be cleaned to the extent previously agreed to by the applicator and General Contractor.

#### 3.4 Inspection and Testing

- 3.4.1 The spray-applied fire resistive material shall be tested for thickness and density in accordance with one of the following procedures:

ASTM E605 - Standard Test Method of Sprayed Fire-Resistive Materials Applied to Structural Members.

AWCI Publication: Technical Manual 12-A Standard Practice for the Testing and Inspection of Field Applied Sprayed Fire-Resistive Materials; an Annotated Guide.

IBC® INTERNATIONAL BUILDING CODE® CHAPTER 17 STRUCTURAL TESTS AND SPECIAL INSPECTIONS, Section 1704 Special Inspections.

#### Product Availability

Isolatek International Spray-Applied Fire Resistive Materials are available to trained, recognized applicators around the world from strategically located production and distribution points in the U.S., Canada, Mexico, Europe and the Pacific Basin.



ISOLATEK INTERNATIONAL is registered with the  
AIA Continuing Education System (AIA/CES)



We support our customers with unsurpassed technical expertise and customer service, complemented by an extensive global network of experienced sales representatives and recognized applicators. For detailed product information or for the name of the sales representative in your area please contact us.

The performance data herein reflect our expectations based on tests conducted in accordance with recognized standard methods under controlled conditions. The applicator, general contractor, property owner and/or user MUST read, understand and follow the directions, specifications and/or recommendations set forth in Isolatek International's publications concerning use and application of these products, and should not rely merely on the information contained in this product data sheet. Isolatek International is not responsible for property damage, bodily injuries, consequential damages, or losses of any kind that arise from or are related to the applicator's, general contractor's, or property owners' failure to follow the recommendations set forth in Isolatek International's publications. The sale of these products shall be subject to the Terms and Conditions set forth in the Company's invoices.



Isolatek International provides passive fireproofing materials under the CAFCO® trademark throughout the Americas and other markets and under the ISOLATEK® trademark throughout the world.

800.631.9600 or 973.347.1200  
www.isolatek.com | technical@isolatek.com



## Section 1 – Chemical Product / Company Information

**Product Name:** CAFCO® 400 AC, CAFCO® 400 ES **Effective Date:** March 26, 2015  
**Product Use/Class:** Spray-Applied Fire Resistive Materials (SFRM)  
**Manufacturer:** United States Mineral Products Company  
 dba Isolatek International  
 41 Furnace Street  
 Stanhope, NJ 07874 USA  
 (973)-347-1200 **Preparer:** R&D Department  
**In Case of Emergency Call: CHEMTREC** **Supersedes:** October 28, 2014  
 800.424.9300 (USA) +1 703.527.3887 (Int'l)

## Section 2 – Hazards Identification

| GHS Classification: | Hazard Category | Route of Exposure |
|---------------------|-----------------|-------------------|
| Hazard Class        |                 |                   |
| Skin Irritation     | 2               | Skin              |
| Skin Sensitizer     | 1               | Skin              |
| Eye Irritation      | 2B              | Eye               |
| Inhalation Toxicity | 4               | Nose/Mouth        |

### Global Harmonization Labeling and Classification:

**Signal word:** Warning

**Hazard Symbol(s):** GHS07



**Overview:** A granular powder that poses little immediate hazard. However, components may contain trace amounts of crystalline silica (quartz). Prolonged exposure to respirable crystalline silica (quartz) may cause cancer.

**Primary Route(s) of Entry:** Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

**Medical Conditions Prone to Aggravation by Exposure:** Sensitive skin; respiratory conditions

| Hazard Statements: |  |
|--------------------|--|
| <b>H303</b>        | May be harmful if swallowed.                                       |
| <b>H313</b>        | May be harmful in contact with skin.                               |
| <b>H320</b>        | Causes eye irritation.   |
| <b>H335</b>        | May cause respiratory irritation.                                  |
| <b>H373</b>        | May cause damage to organs through prolonged or repeated exposure. |

| <b>Precautionary Statements:</b> |   |
|----------------------------------|---|
| <b>P202</b>                      | Do not handle until safety precautions have been read and understood.                     |
| <b>P261</b>                      | Avoid breathing dust/ fumes/ gas/ mist/ vapours/ spray.                                   |
| <b>P271</b>                      | Use only outdoors or in a well ventilated area.   |
| <b>P280</b>                      | Wear protective gloves/ protective clothing/ eye protection/ face protection.             |
| <b>P284</b>                      | Wear respiratory protection.  |
| <b>P402+P403</b>                 | Store in a dry place. Store in a well ventilated place.                                   |
| <b>EUH401</b>                    | To avoid risks to human health and the environment, comply with the instructions for use. |

| <b>Response:</b>                          |   |
|---|---|
| <b>P301+P330<br/>P331+P312</b>            | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/ physician if you feel unwell.  |
| <b>P302+P352+<br/>P332+P313+<br/>P363</b> | IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Wash contaminated clothing before reuse.  |
| <b>P304+P340+<br/>P342+P313</b>           | IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice/ attention.   |
| <b>P305+P351+<br/>P338+P337+<br/>P313</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention. |

| <b>Storage:</b>            |  |
|----------------------------|--|
| <b>P402+P403+<br/>P232</b> | Store in a dry place. Store in a well ventilated place. Protect from moisture. |

| <b>Disposal:</b> |  |
|------------------|--|
| <b>P501</b>      | Dispose of contents/container in accordance with local/regional/national/international regulations (see section 13). |

### Section 3 – Composition / Information On Ingredients

| Chemical Name               | CAS Number  | Wt. % (Max.) |
|-----------------------------|-------------|--------------|
| Calcium Sulfate Hemihydrate | 26499-65-0  | 55 - 80      |
| Vermiculite                 | 1318-00-9   | 15 - 35      |
| Cellulose                   | 065996-61-4 | 1 - 10       |
| Calcium Carbonate           | 1317-65-3   | 1 - 10       |
| Quartz                      | 014808-60-7 | 0 - 5        |

### Section 4 – First Aid Measures

**General** – If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

**First Aid – Skin Contact:** Wash with soap and water. Remove contaminated clothing. If persistent irritation occurs, seek medical attention.

**First Aid – Eye Contact:** Flush eyes thoroughly with copious amounts of water. Seek medical attention if irritation persists.

**First Aid – Inhalation:** Remove to fresh air. Seek medical attention if irritation persists.

**First Aid – Ingestion:** Do not induce vomiting. Rinse mouth out with water. Seek medical attention if irritation persists.

**Protection of first aid responders:** Wear proper personal protective clothing and equipment.

## Section 5 – Fire Fighting Measures

**Extinguishing Media:** Not Applicable. Product will not burn.

**Unusual Fire & Explosion Hazards:** None unless noted below in Section 6.

**Special Firefighting Procedures:** None.

## Section 6 – Accidental Release Measures

**Steps To Be Taken If Material Is Released Or Spilled:** Sweep up material and place in disposal containers. Avoid inhalation of dust. Dispose of material in accordance with all federal, state, and local regulations. Use personal protective equipment as necessary.

## Section 7 – Handling And Storage

**Precautions for safe handling:** Avoid inhalation of dust. Avoid skin & eye contact. Wear skin and eye protection during use. Use normal personal hygiene to remove materials, contaminants; wash clothing separately before re-use.

**Conditions for safe storage:** Keep dry. Keep containers closed when not in use. Store in a cool, dry place with adequate ventilation.

## Section 8 – Exposure Controls / Personal Protection

### Permissible Exposure Limits

| Chemical Name               | CAS Number  | OSHA PEL  | ACGIH TLV  | NIOSH  | Mexico  |
|-----------------------------|-------------|---|--|--|---|
| Calcium Sulfate Hemihydrate | 26499-65-0  | 15 mg/m <sup>3</sup> TWA<br>(Total Dust)<br>5 mg/m <sup>3</sup> (Respirable<br>Fraction)  | 15 mg/m <sup>3</sup> TWA<br>(Chemical is a<br>particulate matter<br>containing no asbestos<br>and <1% crystalline<br>silica) | 10 mg/m <sup>3</sup> TWA<br>(Total Dust)<br>5 mg/m <sup>3</sup><br>(Respirable<br>Fraction)          | 10<br>(Respirable<br>Fraction)                |
| Vermiculite                 | 1318-00-9   | N/A   | 10mg/m <sup>3</sup> (Total Dust)<br>3 mg/m <sup>3</sup> (Respirable<br>Fraction)   | 0.05 mg/m <sup>3</sup>   | -   |
| Cellulose                   | 065996-61-4 | N/A   | N/A  | N/A  | N/A   |
| Calcium Carbonate           | 1317-65-3   | 15 mg/m <sup>3</sup> TWA<br>(Total Dust)<br>5 mg/m <sup>3</sup><br>(Respirable Fraction)  | -  | 10 mg/m <sup>3</sup> TWA<br>(Total Dust)<br>5 mg/m <sup>3</sup><br>(Respirable<br>Fraction)          | 10<br>(Respirable<br>Fraction)                |
| Quartz                      | 14808-60-7  | 30 mg/m <sup>3</sup> %SiO <sub>2</sub> +2<br>(Total Dust)<br>250 mppcf %SiO <sub>2</sub> +5<br>(Respirable)<br>10 mg/m <sup>3</sup> %SiO <sub>2</sub> +2<br>(Respirable Fraction) | 0.025 mg/m <sup>3</sup> TWA<br>(Respirable Fraction)   | 0.05 mg/m <sup>3</sup> TWA<br>(Total Dust)<br>0.05 mg/m <sup>3</sup> TWA<br>(Respirable<br>Fraction) | 0.010mg/m <sup>3</sup><br>TWA<br>(Total Dust) |

**Engineering Controls:** Exhaust fans may be necessary when mixing in enclosed areas.

**Respiratory Protection:** Wear a proper disposable dust mask to prevent exposure above the limits specified.

**Skin Protection:** Wear gloves and use hand creams to prevent dry skin.

**Eye Protection:** Wear proper eye protection; at minimum, safety glasses with side shields.

**Work / Hygienic Practices:** Use bag opening procedures which minimize dust release. Use anti-slip surfaces on working platforms – material is slippery when wet.

## Section 9 – Physical And Chemical Properties

|   |  |
|---|--|
| <b>Appearance:</b>                          | Light grey or tan, light green or light red, granular powder |
| <b>Odor:</b>                                | Low odor   |
| <b>pH:</b>                                  | 8-10   |
| <b>Melting Point (°F):</b>                  | >1800°F (981°C)  |
| <b>Boiling Point (°F):</b>                  | Not Applicable   |
| <b>Flash Point:</b>                         | Not Applicable   |
| <b>Evaporation Rate:</b>                    | Not Applicable   |
| <b>Flammability:</b>                        | Not Applicable   |
| <b>Lower Explosive Limit:</b>               | Not Applicable   |
| <b>Upper Explosive Limit:</b>               | Not Applicable   |
| <b>Vapor Pressure (mm Hg):</b>              | Not Applicable   |
| <b>Bulk Density (kg/mm3)</b>                | Not Applicable   |
| <b>Solubility in Water:</b>                 | Low  |
| <b>Specific Gravity (H<sub>2</sub>O=1):</b> | Not Applicable   |
| <b>Physical State:</b>                      | Solid  |
| <b>% Volatiles:</b>                         | Not Applicable   |
| <b>Viscosity</b>                            | Not Applicable   |
| <b>Auto ignition temperature</b>            | Not Applicable   |

## Section 10 – Stability And Reactivity

|  |  |
|--|--|
| <b>Chemical Stability (under normal conditions):</b> | Stable   |
| <b>Possibility of Hazardous Reactions:</b>           | No   |
| <b>Conditions to Avoid:</b>                          | Contact with strong acids  |
| <b>Incompatibility:</b>                              | Strong Acids   |
| <b>Hazardous Decomposition Products:</b>             | Stable under normal conditions. Trace amounts of carbon and nitrogen oxide compounds may release under fire. |
| <b>Hazardous Polymerization:</b>                     | No polymerization will occur.  |

## Section 11 – Toxicological Information

| Carcinogenicity             | IARC    |          |          | NTP   |         | OSHA | LD50/LC50         |
|-----------------------------|---------|----------|----------|-------|---------|------|-------------------|
|                             | Group 1 | Group 2A | Group 2B | Known | Suspect |      |                   |
| Chemical Name               |         |          |          |       |         |      |                   |
| Calcium Sulfate Hemihydrate | No      | No       | No       | No    | No      | No   | No Data Available |
| Vermiculite                 | No      | No       | No       | No    | No      | No   | No Data Available |
| Cellulose                   | No      | No       | No       | No    | No      | No   | No Data Available |
| Calcium Carbonate           | No      | No       | No       | No    | No      | No   | No Data Available |
| Quartz                      | Yes     | No       | No       | Yes   | No      | Yes  | No Data Available |

## Section 12 – Ecological Information

**Ecological Information:** No data available

## Section 13 – Disposal Considerations

**Disposal Information:** For waste disposal purposes, this product is not known to be designated as hazardous by current provisions under RCRA. Dispose of in accordance with federal, state and local regulations.

## Section 14 – Transportation Information

|                              |                |
|------------------------------|----------------|
| <b>Proper Shipping Name:</b> | Not Applicable |
| <b>Technical Name:</b>       | Not Applicable |
| <b>Hazard Class:</b>         | Non-Hazardous  |
| <b>UN/NA Number:</b>         | Not Applicable |
| <b>Additional Notes:</b>     | None           |

**Section 15 – Regulatory Information**

|  |                             |                             |      |          |          |
|--|-----------------------------|-----------------------------|------|----------|----------|
| U.S. Federal Regulations<br>SARA 311/312 | Immediate Health<br>(Acute) | Delayed Health<br>(Chronic) | FIRE | PRESSURE | REACTIVE |
|  | No                          | Yes                         | No   | No       | No       |

| U.S. State Regulations | State Hazardous Substance List |     |     |     |     |    |     |
|------------------------|--------------------------------|-----|-----|-----|-----|----|-----|
|                        | CAS Number                     | CA  | MA  | MN  | NJ  | PA | RI  |
|                        | 26499-65-0                     | No  | No  | No  | No  | No | No  |
|                        | 1318-00-9                      | No  | No  | No  | No  | No | No  |
|                        | 065996-61-4                    | No  | No  | No  | No  | No | No  |
|                        | 1317-65-3                      | No  | No  | No  | No  | No | No  |
|                        | 14808-60-7                     | Yes | Yes | Yes | Yes | No | Yes |

**International Regulations as Follows:**

**Chemical Inventory Status**

All chemicals in this product are listed or exempt from listing in the following countries:

| U.S  | Canada     | Europe          | Australia | Korea |
|------|------------|-----------------|-----------|-------|
| TSCA | DSL   NDSL | EINECS   ELINCS | AICS      | ECL   |
| Yes  | Yes   No   | Yes             | Yes       | Yes   |

**Canadian WHMIS**

This SDS has been prepared in compliance with Controlled Product Regulations and contains all information required.

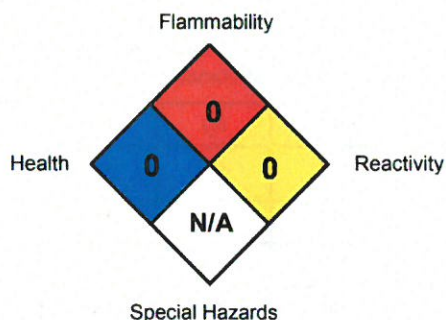
CANADIAN WHMIS CLASS: D2A

**HMIS Rating**

|                            |          |
|----------------------------|----------|
| <b>HEALTH</b>              | <b>1</b> |
| <b>FLAMMABILITY</b>        | <b>0</b> |
| <b>REACTIVITY</b>          | <b>0</b> |
| <b>PERSONAL PROTECTION</b> | <b>e</b> |

Section 16 – Other Information

NFPA



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