SECTION 1: Identification

1.1. Identification
Product form: Mixture
Trade name: Fire Barrier Silicone Sealant
Product code: INSS2460, INSS2460+

1.2. Recommended use and restrictions on use
Use of the substance/mixture: Fill, Void Or Cavity Materials

1.3. Supplier
International Fireproof Technology, Inc.
17528 Von Karman Ave.
Irvine, CA 92614
T 949-975-8588
tom@painttoprotect.com (Tom Hsiang)

1.4. Emergency telephone number
Emergency number: CHEMTREC 1-800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Acute toxicity (oral) Category 4: Harmful if swallowed
Serious eye damage/eye irritation Category 2B: Causes eye irritation

2.2. GHS Label elements, including precautionary statements
GHS-US labeling
Hazard pictograms (GHS-US):

Signal word (GHS-US): Warning
Hazard statements (GHS-US): Harmful if swallowed
Causes eye irritation
Precautionary statements (GHS-US):
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
If swallowed: Call a POISON CENTER if you feel unwell.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Rinse mouth.
If eye irritation persists: Get medical advice/attention.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification
Other hazards not contributing to the classification: Titanium dioxide is in a form that is not available for respiration. Silica is in a form that is not available for respiration.

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate</td>
<td>(CAS-No.) 68333-79-9</td>
<td>25 - 35</td>
<td>Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320</td>
</tr>
</tbody>
</table>
SECTION 4: First-aid measures

4.1. 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).

First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: In case of eye contact, immediately rinse with clean water for 10-15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact: May cause slight temporary irritation.

Symptoms/effects after eye contact: Causes eye irritation.

Symptoms/effects after ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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: None known.

5.2. Specific hazards arising from the chemical

Fire hazard: On combustion, forms: carbon oxides (CO and CO2).

Explosion hazard: No direct explosion hazard.

Reactivity: Stable under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. 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

General measures: Avoid contact with spilled material.

6.1.1. For non-emergency personnel

Protective equipment: Wear personal protective equipment.

Emergency procedures: Evacuate unnecessary personnel.

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. Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Shovel or sweep up and put in a closed container for disposal. Collect spillage. Store away from other materials.
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### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling: Use only outdoors or in a well-ventilated area. Avoid contact with eyes.

Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safety practice.

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

**Storage conditions**: Keep only in the original container in a cool well ventilated place.

**Incompatible materials**: Keep away from strong acids, strong bases and oxidizing agents.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<table>
<thead>
<tr>
<th>Material</th>
<th>OSHA PEL (TWA) (mg/m³)</th>
<th>IDLH</th>
<th>NIOSH REL (TWA) (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tridymite (15468-32-3)</td>
<td>50 µg/m³</td>
<td>25 mg/m³ (respirable dust)</td>
<td>0.05 mg/m³ (respirable dust)</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure adequate ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### 8.3. Individual protection measures/Personal protective equipment

**Hand protection:**
Impermeable protective gloves

**Eye protection:**
Chemical goggles or safety glasses

**Respiratory protection:**
Not necessary under the recommended storage and handling conditions

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Paste. Viscous.</td>
</tr>
<tr>
<td>Color</td>
<td>white black or gray</td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific gravity / density</td>
<td>1.3 ± 0.1</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not miscible</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>100 - 150 Pa.s</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

Stable under normal conditions of use.

**10.2. Chemical stability**

Stable at ambient temperature and under normal conditions of use.

**10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

**10.4. Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

**10.5. Incompatible materials**

Keep away from strong acids, strong bases and oxidizing agents.

**10.6. Hazardous decomposition products**

No hazardous decomposition products known at room temperature. On combustion, forms: carbon oxides (CO and CO2).

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

- **Acute toxicity (oral)**: Oral: Harmful if swallowed.
- **Acute toxicity (dermal)**: Not classified (Based on available data, the classification criteria are not met)
- **Acute toxicity (inhalation)**: Not classified (Based on available data, the classification criteria are not met)

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50 oral rat</th>
<th>LD50 oral rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
<td>1033 mg/kg body weight</td>
<td></td>
</tr>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>300 - 2000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

- **Skin corrosion/irritation**: Not classified (Based on available data, the classification criteria are not met)
- **pH**: Not available
- **Serious eye damage/irritation**: Causes eye irritation.
- **pH**: Not available
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Respiratory or skin sensitization: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)

Fire Barrier Silicone Sealant
Additional information
Titanium dioxide is in a form that is not available for respiration
Silica is in a form that is not available for respiration

Tridymite (15468-32-3)
IARC group 1 - Carcinogenic to humans
National Toxicity Program (NTP) Status Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list Yes

Titanium dioxide (13463-67-7)
IARC group 2B - Possibly carcinogenic to humans
In OSHA Hazard Communication Carcinogen list Yes

Reproductive toxicity: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – single exposure: Not classified (Based on available data, the classification criteria are not met)
Specific target organ toxicity – repeated exposure: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard: Not classified (Based on available data, the classification criteria are not met)
Viscosity, kinematic: No data available
Likely routes of exposure: Inhalation. Ingestion. Eyes. Skin.
Symptoms/effects after skin contact: May cause slight temporary irritation.
Symptoms/effects after eye contact: Causes eye irritation.
Symptoms/effects after ingestion: Harmful if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: This material has not been tested for environmental effects.

Ammonium polyphosphate (68333-79-9)
LC50 fish 1 > 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC50 fish 2 123 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods
Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials: Avoid release to the environment.

### SECTION 14: Transport information

**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. US Federal regulations

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory/Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>Listed on the United States TSCA (Toxic Substances Control Act) inventory</td>
</tr>
</tbody>
</table>

#### 15.2. International regulations

**CANADA**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory/Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>Listed on the Canadian DSL (Domestic Substances List)</td>
</tr>
</tbody>
</table>

**EU-Regulations**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory/Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Tridymite (15468-32-3)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)</td>
</tr>
</tbody>
</table>

**National regulations**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Inventory/Regulatory Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Listed on the AICS (Australian Inventory of Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)</td>
</tr>
<tr>
<td></td>
<td>Listed on the Japanese ENCS (Existing &amp; New Chemical Substances) inventory</td>
</tr>
<tr>
<td></td>
<td>Listed on the Japanese ISHL (Industrial Safety and Health Law)</td>
</tr>
<tr>
<td></td>
<td>Listed on the Korean ECL (Existing Chemicals List)</td>
</tr>
<tr>
<td></td>
<td>Listed on NZIoC (New Zealand Inventory of Chemicals)</td>
</tr>
<tr>
<td></td>
<td>Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)</td>
</tr>
<tr>
<td></td>
<td>Listed on CICR (Turkish Inventory and Control of Chemicals)</td>
</tr>
<tr>
<td></td>
<td>Listed on the TCSI (Taiwan Chemical Substance Inventory)</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Carcinogenicity</th>
<th>Developmental toxicity</th>
<th>Reproductive toxicity male</th>
<th>Reproductive toxicity female</th>
<th>No significant risk level (NSRL)</th>
<th>Maximum allowable dose level (MADL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tridymite (15468-32-3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium dioxide (13463-67-7)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**15.3. US State regulations**

**WARNING:** This product can expose you to Titanium dioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Component | Carcinogenicity | Developmental toxicity | Reproductive toxicity male | Reproductive toxicity female | No significant risk level (NSRL) | Maximum allowable dose level (MADL) |
-----------|-----------------|------------------------|----------------------------|------------------------------|---------------------------------|--------------------------------------|
Titanium dioxide (13463-67-7) | X               |                        |                            |                              |                                 |                                      |

**SECTION 16: Other information**

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

Revision date : 08 August 2018
Other information : None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H-component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.