SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Fire Barrier Foam
Product code : US150A

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 H302 - Harmful if swallowed
Serious eye damage/eye irritation Category 2B H320 - Causes eye irritation

Full text of H statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US):

Warning

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) :
H302 - Harmful if swallowed
H320 - Causes eye irritation
Precautionary statements (GHS-US) :
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301+P312 - If swallowed: Call a POISON CENTER, a doctor if you feel unwell
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P330 - Rinse mouth.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P501 - Dispose of contents/container to comply with applicable local, national and international regulation.

2.3. Other hazards which do not result in classification

No additional information available

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.) 88333-79-9</td>
<td>10 - 20</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 after inhalation: Move the affected person away from the contaminated area and into the fresh air. Get medical advice/attention 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. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact: Rinse immediately with plenty of water for 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. Get medical advice/attention.

**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**

- Explosion hazard: Risk of explosion if heated under confinement.
- 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**

**6.1.1. For non-emergency personnel**

- Emergency procedures: Evacuate unnecessary personnel. Wear recommended personal protective equipment.

**6.1.2. For emergency responders**

- Protective equipment: Equip cleanup crew with proper protection. Use self-contained breathing apparatus.
- Emergency procedures: Ventilate area.

**6.2. Environmental precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**6.3. Methods and material for containment and cleaning up**

- Methods for cleaning up: Small spills: Stop leak if safe to do so. Dilute with plenty of water. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Dispose of at a licensed waste collection center. In case of large spillages: Approach from upwind. Wash contaminated area with large amounts of water. Consult an expert on waste disposal or treatment.

**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: Avoid contact with eyes. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures: Avoid breathing mist, vapors. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. 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 away from: Incompatible materials. Keep container closed when not in use.

Incompatible materials: Strong acids, alkalis, oxidizing agent, organic solvents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>1,4-Butanediol (110-63-4)</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>Not applicable</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. Protective gloves made of rubber or PVC

Eye protection: Chemical goggles or safety glasses

Respiratory protection: In case of inadequate ventilation wear respiratory protection. If the occupational exposure limit is exceeded: Wear a self contained breathing apparatus, suitable respiratory equipment (breathing apparatus with filter)

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

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</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>Not applicable.</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>1.0 - 1.2</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not miscible.</td>
</tr>
</tbody>
</table>
Fire Barrier Foam
Safety Data Sheet
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>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>No data available</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>

9.2. Other information

VOC content: < 10 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials


10.6. Hazardous decomposition products

On combustion forms: Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity: Not classified

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Barrier Foam</td>
<td>Not classified</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>1508 mg/kg body weight</td>
</tr>
<tr>
<td>1,4-Butanediol (110-63-4)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>1525 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 5.1 mg/l/4h</td>
</tr>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>300 - 2000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified

(Based on available data, the classification criteria are not met)

Serious eye damage/irritation: Causes eye irritation.

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)

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)
**Fire Barrier Foam**

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

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**Aspiration hazard**

Not classified

(Based on available data, the classification criteria are not met)

**Likely routes of exposure**

Ingestion. Inhalation. Skin and eye contact.

**Potential Adverse human health effects and symptoms**

Harmful if swallowed. Causes serious eye irritation.

**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.

**Other information**

Likely routes of exposure: ingestion, inhalation, skin and eye.

---

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecology - general

This material has not been tested for environmental effects.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-Butanediol (110-63-4)</td>
<td>EC50 Daphnia 1</td>
<td>813 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>Ammonium polyphosphate (68333-79-9)</td>
<td>LC50 fish 1</td>
<td>&gt; 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])</td>
</tr>
<tr>
<td></td>
<td>LC50 fish 2</td>
<td>123 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

Fire Barrier Foam

Persistence and degradability

Not established.

**12.3. Bioaccumulative potential**

Fire Barrier Foam

Bioaccumulative potential

Not established.

<table>
<thead>
<tr>
<th>Substance</th>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,4-Butanediol (110-63-4)</td>
<td>Log Pow</td>
<td>-0.88 (at 25 °C)</td>
</tr>
</tbody>
</table>

**12.4. Mobility in soil**

No additional information available

**12.5. Other adverse effects**

Other information

Avoid release to the environment.

---

**SECTION 13: Disposal considerations**

**13.1. Disposal methods**

Product/Packaging disposal recommendations

Dispose of contents/container to comply with applicable local, national and international regulation, a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.

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**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**

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**

- **1,4-Butanediol** (110-63-4)
  - Listed on the Canadian DSL (Domestic Substances List)
- **Ammonium polyphosphate** (68333-79-9)
  - Listed on the Canadian DSL (Domestic Substances List)

**EU-Regulations**

- **1,4-Butanediol** (110-63-4)
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- **Ammonium polyphosphate** (68333-79-9)
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

**National regulations**

- **1,4-Butanediol** (110-63-4)
  - Listed on the AICS (Australian Inventory of Chemical Substances)
  - Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
  - Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
  - Listed on the Japanese ISHL (Industrial Safety and Health Law)
  - Listed on the Korean ECL (Existing Chemicals List)
  - Listed on NZIoC (New Zealand Inventory of Chemicals)
  - Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
  - Listed on INSQ (Mexican National Inventory of Chemical Substances)
  - Listed on CICR (Turkish Inventory and Control of Chemicals)
  - Listed on the TCSI (Taiwan Chemical Substance Inventory)
- **Ammonium polyphosphate** (68333-79-9)
  - Listed on the AICS (Australian Inventory of Chemical Substances)
  - Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
  - Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
  - Listed on the Japanese ISHL (Industrial Safety and Health Law)
  - Listed on the Korean ECL (Existing Chemicals List)
  - Listed on NZIoC (New Zealand Inventory of Chemicals)
  - Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
  - Listed on CICR (Turkish Inventory and Control of Chemicals)
  - Listed on the TCSI (Taiwan Chemical Substance Inventory)

**15.3. US State regulations**

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

**SECTION 16: Other information**

Revision date : 13 June 2018

Other information : None.

Full text of H-phrases:

- **H302** Harmful if swallowed
- **H320** Causes eye irritation
- **H336** May cause drowsiness or dizziness

Abbreviations and acronyms:

- PVC (Polyvinyl chloride).

SDS US (GHS HazCom 2012) Prop 65 Correction

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.