# Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Product name** ANSULITE 6% AFFF (AFC-6MS)

## 1. Identification

1.1. **Product Identifier**
Product name: ANSULITE 6% AFFF (AFC-6MS)

1.2. **Other means of identification**
Product code: 442712
Synonyms: None
Chemical Family: No information available

1.3. **Recommended use of the chemical and restrictions on use**
Recommended use: Fire extinguishing agent.
Uses advised against: Consumer use.

1.4. **Details of the Supplier of the Safety Data Sheet**
Company Name: Tyco Fire Protection Products
One Stanton Street
Marinette, WI 54143-2542
Telephone: 715-735-7411
Contact point: Product Stewardship at 1-715-735-7411
E-mail address: psra@tycofp.com

1.5. **Emergency Telephone Number**
Emergency telephone: CHEMTREC 001-800-424-9300 or 001-703-527-3887

## 2. Hazards Identification

### Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation - Category 2A

### 2.2. Label Elements

**Signal Word**
WARNING

**Hazard Statements**
Causes serious eye irritation

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**Precautionary Statements**

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**Revision date** 11-Jan-2019  
**Version** 3
Prevention
Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

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.

2.3. Hazards Not Otherwise Classified (HNOC)
Not Applicable.

2.4. Other Information
May be harmful if swallowed.

3. Composition/information on Ingredients

3.1. Mixture
The following component(s) in this product are considered hazardous under applicable OSHA(USA)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>107-21-1</td>
<td>7 - 13</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol</td>
<td>112-34-5</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Laurylamidopropyl betaine</td>
<td>4292-10-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Caprylcapryl glucoside</td>
<td>68515-73-1</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Polyfluorinated alkyl polyamide</td>
<td>Proprietary</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

4. First aid measures

4.1. Description of first aid measures
Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact
Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation
Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).

Ingestion
Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.

4.2. Most Important Symptoms and Effects, Both Acute and Delayed
Symptoms
No information available.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
Note to physicians
Treat symptomatically.

5. Fire-fighting measures

5.1. Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
5.2. Unsuitable Extinguishing Media
None.

5.3. Specific Hazards Arising from the Chemical
None known.

| Hazardous Combustion Products | Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur |

5.4. Explosion Data

| Sensitivity to Mechanical Impact | None. |
| Sensitivity to Static Discharge    | None. |

5.5. Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| Personal Precautions | Ensure adequate ventilation, especially in confined areas. |
| For emergency responders | Use personal protection recommended in Section 8. |

6.2. Environmental Precautions

| Environmental Precautions | Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information. |

6.3. Methods and material for containment and cleaning up

| Methods for Containment | Prevent further leakage or spillage if safe to do so. |
| Methods for Cleaning Up | Pick up and transfer to properly labeled containers. |

7. Handling and Storage

7.1. Precautions for Safe Handling

| Advice on safe handling | Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. |

7.2. Conditions for safe storage, including any incompatibilities

| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. |

8. Exposure Controls/Personal Protection
8.1. Control Parameters

Exposure guidelines

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>Mexico OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>STEL: 50 ppm vapor fraction STEL: 10 mg/m^3 inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction</td>
<td>-</td>
<td>-</td>
<td>100 mg/m^3 (Ceiling)</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol 112-34-5</td>
<td>TWA: 10 ppm inhalable fraction and vapor</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health

8.2. Appropriate Engineering Controls

Engineering controls
Ensure adequate ventilation, especially in confined areas.

8.3. Individual protection measures, such as personal protective equipment

- **Eye/Face Protection**: Avoid contact with eyes. Tight sealing safety goggles.
- **Skin and Body Protection**: Wear protective gloves and protective clothing.
- **Respiratory Protection**: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Ventilation**: Use local exhaust or general dilution ventilation to control exposure with applicable limits.

8.4. General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7 - 8.5</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
  - Upper flammability limit:      | No data available |            |
  - Lower flammability limit:       | No data available |            |
| Vapor Pressure                    | No data available |          |
| Color                             | Light yellow |                  |
Product code 442712 / Product name ANSULITE 6% / AFFF (AFC-6MS)

VOC content (%) 19.378
Density 1.03

10. Stability and Reactivity

10.1. Chemical Stability
Stable under recommended storage conditions.

10.2. Reactivity
No data available

10.3. Possibility of hazardous reactions
None under normal processing.

   Hazardous Polymerization Hazardous polymerization does not occur.

10.4. Conditions to Avoid
Extremes of temperature and direct sunlight.

10.5. Incompatible Materials

10.6. Hazardous decomposition products

11. Toxicological Information

11.1. Information on Likely Routes of Exposure

   Product information No data available

   Inhalation No data available.

   Eye Contact Severely irritating to eyes.

   Skin contact No data available.

   Ingestion May be harmful if swallowed.

   Component Information

   Acute Toxicity
### 11.2. Information on Toxicological Effects

#### Symptoms

No information available.

#### 11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Serious eye damage/eye irritation** Severely irritating to eyes.

### Component Information

**Polyfluorinated alkyl polyamide**

<table>
<thead>
<tr>
<th>Method</th>
<th>species</th>
<th>Exposure Route</th>
<th>Effective dose</th>
<th>Exposure time</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD Test No. 405: Acute Eye Irritation/Corrosion</td>
<td>Rabbit</td>
<td>eye</td>
<td></td>
<td></td>
<td>Class 4 on a 1 to 8 scale according to a modified Kay and Calandra classification system. Mild eye irritation</td>
</tr>
</tbody>
</table>

### Component Information

**Polyfluorinated alkyl polyamide**

<table>
<thead>
<tr>
<th>Method</th>
<th>species</th>
<th>Exposure Route</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD Test No. 429: Skin Sensitisisation: Local Lymph Node Assay</td>
<td>mouse</td>
<td>dermal</td>
<td>sensitizing</td>
</tr>
</tbody>
</table>

### Component Information

**Polyfluorinated alkyl polyamide**

<table>
<thead>
<tr>
<th>Method</th>
<th>species</th>
<th>Results</th>
</tr>
</thead>
</table>

**Carcinogenicity** No information available.

**Reproductive Toxicity** No information available.

**STOT - Single Exposure** No information available.

**STOT - Repeated Exposure** No information available.

**Target organ effects** Central Nervous System, Eyes, Respiratory System, Skin.

**Aspiration Hazard** No information available.

### 11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral) 4236 mg/kg
- ATEmix (dermal) 29949 mg/kg

### 12. Ecological Information

#### 12.1. Ecotoxicity

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol</td>
<td>EC50 (96h) 6500 - 13000 mg/L</td>
<td>LC50 (96h) static = 27540 mg/L</td>
<td>EC50 (48h) = 46300 mg/L</td>
</tr>
<tr>
<td>107-21-1</td>
<td>Pseudokirchneriella subcapitata</td>
<td>Lepomis macrochirus LC50 (96h)</td>
<td>Daphnia magna</td>
</tr>
</tbody>
</table>
### Polyfluorinated alkyl polyamide

<table>
<thead>
<tr>
<th>Method</th>
<th>Species</th>
<th>Endpoint type</th>
<th>Effective dose</th>
<th>Exposure time</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD Test No. 203: Fish, Acute Toxicity Test</td>
<td>Oncorhynchus mykiss (rainbow trout)</td>
<td>LC50</td>
<td>&gt;14 mg/l</td>
<td>96h</td>
<td>NOEC: 14 mg/L No toxic effects at saturation.</td>
</tr>
<tr>
<td>OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test</td>
<td>Algae</td>
<td>ErC50</td>
<td>&gt;15 mg/l</td>
<td>72h</td>
<td>Growth rate &gt;15. NOE: 4.0 mg/L, LOEC: 8.5 mg/L</td>
</tr>
<tr>
<td>OECD Test No. 202: Daphnia sp., Acute Immobilization Test</td>
<td>Daphnia magna</td>
<td>EC50</td>
<td>&gt;20 mg/l</td>
<td>48h</td>
<td>NOEC: 20 mg/L No toxic effects at saturation.</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and Degradability

No information available.

### 12.3. Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol 107-21-1</td>
<td>-1.93</td>
</tr>
</tbody>
</table>

12.4. Other Adverse Effects
No information available

13. Disposal Considerations

13.1. Waste Treatment Methods
Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Do not reuse container.

14. Transport Information

DOT
NOT REGULATED

TDG
NOT REGULATED

MEX
NOT REGULATED

ICAO (air)
NOT REGULATED

IATA
NOT REGULATED

IMDG
NOT REGULATED

15. Regulatory Information

15.1. International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECSC</td>
<td>Does not comply</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>AICS</td>
<td>Does not comply</td>
</tr>
</tbody>
</table>

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

15.2. US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical
or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol - 107-21-1</td>
<td>1.0</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol - 112-34-5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

- **Acute Health Hazard**: Yes
- **Chronic health hazard**: No
- **Fire Hazard**: No
- **Sudden Release of Pressure Hazard**: No
- **Reactive Hazard**: No

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol - 107-21-1</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol - 112-34-5</td>
<td>-</td>
<td>-</td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

**15.3. US State Regulations**

**California Proposition 65**
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol - 107-21-1</td>
<td>Developmental</td>
</tr>
<tr>
<td>Perfluorooctanoic acid - 335-67-1</td>
<td>Developmental Toxicity</td>
</tr>
</tbody>
</table>

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol - 107-21-1</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy)ethanol - 112-34-5</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

**16. Other information, including date of preparation of the last revision**

<table>
<thead>
<tr>
<th>NFPA Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical properties - Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

| HMIS Health Hazards | Flammability | Physical Hazards | |
|---------------------|--------------|-------------------|
| 2                   | 0            | 0                 | |

**Revision date**: 11-Jan-2019

**Revision note**: SDS sections updated, 2, 3, 11, 12.

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other
materials or in any process, unless specified in the text.

End of Safety Data Sheet