# Safety Data Sheet

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

**Product name** ANSULITE AFC-3MS 3% AFFF CONCENTRATE

## 1. Identification

### 1.1. Product Identifier

**Product name** ANSULITE AFC-3MS 3% AFFF CONCENTRATE

### 1.2. Other means of identification

**Product code** 442683R
**Synonyms** None
**Chemical Family** No information available

### 1.3. Recommended use of the chemical and restrictions on use

**Recommended use** No information available.
**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 1-800-424-9300

## 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 1
Skin Sensitization - Category 1B

### 2.2. Label Elements

**Signal Word**
DANGER

**Hazard Statements**
Causes serious eye damage
May cause an allergic skin reaction

**Precautionary Statements**

**Prevention**
Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Disposal**
Dispose of contents/container to an approved waste disposal plant.

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

### 2.4. Other Information

## 3. Composition/information on Ingredients

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

| Chemical name | CAS No. | weight-% |
|---|---|---|
| 2-(2-Butoxyethoxy)ethanol | 112-34-5 | 10 - 30 |
| Laurylamidopropyl betaine | 4292-10-8 | 1 - 5 |
| Caprylcaprilyl glucoside | 68515-73-1 | 1 - 5 |
| Polyfluorinated alkyl polyamide | Proprietary | 1 - 5 |
| Octylphenoxypolyethoxyethanol | 9036-19-5 | 1 - 5 |
| Polyfluorinated alkyl quaternary amine chloride | Proprietary | 0.1 - 1 |

## 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.

**Incompatible Materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. Exposure Controls/Personal Protection

### 8.1. Control Parameters

**Exposure guidelines**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH | Mexico OEL |
|---|---|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | TWA: 10 ppm inhalable fraction and vapor | - | - | - |

*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

**Physical State** Liquid
**Odor** Characteristic
**Color** Light yellow
**Odor Threshold** No data available

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | 7 - 8.5 | |
| **Melting point/freezing point** | No data available | |
| **Boiling point / boiling range** | No data available | |
| **Flash Point** | No data available | |
| **Evaporation Rate** | No data available | |

| | |
|---|---|
| **Flammability (solid, gas)** | No data available |
| **Flammability limit in air** | |
| **Upper flammability limit:** | No data available |
| **Lower flammability limit:** | No data available |
| **Vapor Pressure** | No data available |
| **Vapor Density** | No data available |
| **Specific gravity** | No data available |
| **Water Solubility** | No data available |
| **Solubility in Other Solvents** | No data available |
| **Partition coefficient** | No data available |
| **Autoignition Temperature** | No data available |
| **Decomposition Temperature** | No data available |
| **Kinematic viscosity** | No data available |
| **VOC content (%)** | 18.766 |
| **Density** | 1.02 |

## 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

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

## 11. Toxicological Information

### 11.1. Information on Likely Routes of Exposure

**Product information** No data available

**Inhalation** No data available.

**Eye Contact** Corrosive to the eyes and may cause severe damage including blindness.

**Skin contact** No data available.

**Ingestion** No data available.

**Component Information**
**Acute Toxicity**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | = 5660 mg/kg ( Rat ) | = 2700 mg/kg ( Rabbit ) | - |
| Laurylamidopropyl betaine 4292-10-8 | > 2000 mg/kg ( Rat ) | - | - |
| Polyfluorinated alkyl polyamide | >2000 mg/kg | >2000 mg/kg | >5.11 mg/l |
| Octylphenoxypolyethoxyethanol 9036-19-5 | = 4190 mg/kg ( Rat ) = 1700 mg/kg ( Rat ) | - | - |
| Polyfluorinated alkyl quaternary amine chloride | >300 - <2000 mg/kg | - | - |

**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

| Component Information | | | | | |
|---|---|---|---|---|---|
| Polyfluorinated alkyl quaternary amine chloride | | | | | |
| Method | species | Exposure Route | Effective dose | Exposure time | Results |
| OECD Test No. 439: In Vitro Skin Irritation: Reconstructed Human Epidermis Test Method | EPISKIN™ | in vitro | | | Non-irritant |

**Serious eye damage/eye irritation** Risk of serious damage to eyes.

| Component Information | | | | | |
|---|---|---|---|---|---|
| Polyfluorinated alkyl polyamide | | | | | |
| Method | species | Exposure Route | Effective dose | Exposure time | Results |
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit | eye | | | Class 4 on a 1 to 8 scale according to a modified Kay and Calandra classification system. Mild eye irritation |

**Sensitization** May cause sensitization by skin contact.

| Component Information | | | |
|---|---|---|---|
| Polyfluorinated alkyl polyamide | | | |
| Method | species | Exposure Route | Results |
| OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay | mouse | dermal | sensitizing |

| Polyfluorinated alkyl quaternary amine chloride | | | |
|---|---|---|---|
| Method | species | Exposure Route | Results |
| OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay | mouse | dermal | sensitizing |

| Component Information |
|---|

| Polyfluorinated alkyl polyamide | | |
|---|---|---|
| Method | species | Results |
| OECD Test No. 473: In vitro Mammalian Chromosome Aberration Test | in vitro | Non-clastogenic to human lymphocytes in vitro. |

**Carcinogenicity** No information available.
**Reproductive Toxicity** No information available.
**STOT - Single Exposure** No information available.
**STOT - Repeated Exposure** No information available.
**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)** 5319 mg/kg
**ATEmix (dermal)** 12073 mg/kg
**ATEmix (inhalation-dust/mist)** 132.4 mg/l

## 12. Ecological Information

### 12.1. Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | EC50 (96h) > 100 mg/L Desmodesmus subspicatus | LC50 (96h) static = 1300 mg/L Lepomis macrochirus | EC50 (48h) > 100 mg/L Daphnia magna EC50 (24h) = 2850 mg/L Daphnia magna |
| 2-Methyl-2,4-pentanediol 107-41-5 | - | LC50 (96h) static = 10700 mg/L Pimephales promelas LC50 (96h) static = 10000 mg/L Lepomis macrochirus LC50 (96h) flow-through = 8690 mg/L Pimephales promelas LC50 (96h) flow-through 10500 - 11000 mg/L Pimephales promelas | EC50 (48h) 2700 - 3700 mg/L Daphnia magna |
| t-Butanol 75-65-0 | EC50 (72h) > 1000 mg/L Desmodesmus subspicatus | LC50 (96h) flow-through 6130 - 6700 mg/L Pimephales promelas | EC50 (48h) = 933 mg/L Daphnia magna EC50 (48h) Static 4607 - 6577 mg/L Daphnia magna |
| Polyethylene Glycol 25322-68-3 | - | LC50 (24h) > 5000 mg/L Carassius auratus | - |
| Sodium chloride 7647-14-5 | - | LC50 (96h) flow-through 4747 - 7824 mg/L Oncorhynchus mykiss LC50 (96h) semi-static = 7050 mg/L Pimephales promelas LC50 (96h) static = 12946 mg/L Lepomis macrochirus LC50 (96h) static 6020 - 7070 mg/L Pimephales promelas LC50 (96h) flow-through 5560 - 6080 mg/L Lepomis macrochirus LC50 (96h) static 6420 - 6700 mg/L Pimephales promelas | EC50 (48h) Static 340.7 - 469.2 mg/L Daphnia magna EC50 (48h) = 1000 mg/L Daphnia magna |
| 4,4'-bis-(sulfostyryl)-biphenyl disodium salt 27344-41-8 | EC50 (72h) = 10 mg/L Desmodesmus subspicatus EC50 (96h) 10.0 - 11.0 mg/L Desmodesmus subspicatus | LC50 (96h) static = 76 mg/L Brachydanio rerio | EC50 (48h) = 1000 mg/L Daphnia magna |

**Polyfluorinated alkyl polyamide**

| Method | Species | Endpoint type | Effective dose | Exposure time | Results |
|---|---|---|---|---|---|
| OECD Test No. 203: Fish, Acute Toxicity Test | Oncorhynchus mykiss (rainbow trout) | LC50 | >14 mg/l | 96h | NOEC: 14 mg/L No toxic effects at saturation. |
| OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test | Algae | ErC50 | >15 mg/l | 72h | Growth rate >15, Yield 13. NOEC: 4.0 mg/L, LOEC: 8.5 mg/L |
| OECD Test No. 202: Daphnia sp., Acute Immobilization Test | Daphnia magna | EC50 | >20 mg/l | 48h | NOEC: 20 mg/L No toxic effects at saturation. |

| **Polyfluorinated alkyl quaternary amine chloride** | | | | | |
|---|---|---|---|---|---|
| Method | Species | Endpoint type | Effective dose | Exposure time | Results |
| OECD Test No. 211: Daphnia magna Reproduction Test | Daphnia magna | NOEC | 5.38 mg/L | 21 days | |
| OECD Test No. 202: Daphnia sp., Acute Immobilization Test | Daphnia magna | EC50 | 2.6 mg/L | 48h | |
| OECD Test No. 210: Fish, Early-Life Stage Toxicity Test | Pimephales promelas | NOEC | 11.8 mg/L | 33 days | |
| OECD Test No. 203: Fish, Acute Toxicity Test | Cyprinus carpio | LC50 | 98 mg/L | 96h | |
| OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test | Pseudokirchneriella subcapitata | EC50 | 788 mg/L | 96h | |

### 12.2. Persistence and Degradability
No information available.

### 12.3. Bioaccumulation
No information available.

### 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

| | |
|---|---|
| **TSCA** | Complies |
| **DSL/NDSL** | Does not comply |
| **ENCS** | Does not comply |
| **IECSC** | Does not comply |
| **KECL** | Does not comply |
| **PICCS** | Does not comply |
| **AICS** | Does not comply |

**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

| Chemical name | SARA 313 - Threshold Values % |
|---|---|
| 2-(2-Butoxyethoxy)ethanol - 112-34-5 | 1.0 |

**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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### 15.3. US State Regulations

**California Proposition 65**

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 |
|---|---|
| Perfluorooctanoic acid - 335-67-1 | Developmental Toxicity |

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

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---|---|---|---|
| 2-(2-Butoxyethoxy)ethanol 112-34-5 | X | - | X |

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

| | | | | |
|---|---|---|---|---|
| **NFPA** | **Health Hazards** 2 | **Flammability** 0 | **Instability** 0 | **Physical and chemical properties** - |
| **HMIS** | **Health Hazards** 2 | **Flammability** 0 | **Physical Hazards** 0 | **Personal Protection** X |

**Revision date** 13-Jan-2019
**Revision note** No information available.

**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**