

### SECTION 1: Product and company identification

Product name : Fire Fighting Foam  
 Use of the substance/mixture : AFFF  
 Product code : 0697  
 Company : Total Solutions  
 P.O. Box 240014  
 Milwaukee, WI 53224 - USA  
 T (414) 354-6417  
 Emergency number : Chemtec: (800) 424-9300

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Skin Irrit. 2 H315  
 Eye Irrit. 2 H319  
 STOT RE 2 H373

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : Causes skin irritation  
 Causes serious eye irritation  
 May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : Do not breathe mist, spray  
 Wash thoroughly after handling  
 Wear eye protection, protective clothing, protective gloves  
 If on skin: Wash with plenty of water  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Get medical advice/attention if you feel unwell  
 Specific treatment (see First aid measures on this label)  
 If skin irritation occurs: Get medical advice/attention  
 If eye irritation persists: Get medical advice/attention  
 Take off contaminated clothing and wash it before reuse  
 Dispose of contents/container to comply with local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Not applicable

Full text of H-phrases: see section 16

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	(CAS-No.) 112-34-5	7-13	Eye Irrit. 2A, H319
Sodium (C14-16) olefin sulfonate	(CAS-No.) 68439-57-6	7-13	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
ethanediol, ethylene glycol	(CAS-No.) 107-21-1	3-7	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
Cocamidopropyl Hydroxy Sultaine	(CAS-No.) 68139-30-0	1-5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319
C12-13 ALCOHOLS	(CAS-No.) 75782-86-4	0.5-1.5	Eye Irrit. 2A, H319

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove the victim into fresh air.
- 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. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : 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 with water. Do NOT induce vomiting.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/effects : Causes skin irritation. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.
- Symptoms/effects after inhalation : None under normal use.
- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : Gastrointestinal complaints.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Adapt extinguishing media to the environment.

#### 5.2. Special hazards arising from the substance or mixture

- Reactivity : The product is non-reactive under normal conditions of use, storage and transport. Thermal decomposition may produce : carbon oxides.

#### 5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
- 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 : Isolate from fire, if possible, without unnecessary risk.

##### 6.1.1. For non-emergency personnel

- Protective equipment : Protective goggles. Gloves. Protective clothing.
- Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

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

- For containment : Contain released substance, pump into suitable containers.
- Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash thoroughly after handling. Wash contaminated clothing before reuse.

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

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep container closed when not in use.
- Incompatible products : Strong acids.

# Fire Fighting Foam

## Safety Data Sheet

Storage area : Meet the legal requirements. Store in a cool area. Store in a dry area.  
 Special rules on packaging : meet the legal requirements.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

<b>C12-13 ALCOHOLS (75782-86-4)</b>		
Not applicable		
<b>ethanediol, ethylene glycol (107-21-1)</b>		
ACGIH	ACGIH TWA (ppm)	25 ppm
ACGIH	ACGIH STEL (mg/m³)	10 mg/m³
ACGIH	ACGIH STEL (ppm)	50 ppm
ACGIH	Remark (ACGIH)	Kidney dam; URT & eye irr
<b>2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether (112-34-5)</b>		
ACGIH	ACGIH TWA (ppm)	10 ppm
<b>Sodium (C14-16) olefin sulfonate (68439-57-6)</b>		
Not applicable		
<b>Cocamidopropyl Hydroxy Sultaine (68139-30-0)</b>		
Not applicable		

#### 8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountain with clean water.  
 Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Protective clothing. Safety glasses.



### SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
 Appearance : clear. slight yellow. Liquid.  
 Odor : mild  
 Odor threshold : No data available  
 pH : 9 - 10  
 Melting point : No data available  
 Freezing point : No data available  
 Boiling point : No data available  
 Flash point : > 200 °F Closed Cup  
 Relative evaporation rate (butyl acetate=1) : No data available  
 Flammability (solid, gas) : No data available  
 Explosion limits : No data available  
 Explosive properties : No data available  
 Oxidizing properties : No data available  
 Vapor pressure : No data available  
 Relative density : No data available  
 Relative vapor density at 20 °C : No data available  
 Specific gravity / density : 1.03 g/ml  
 Solubility : Soluble in water.  
 Log Pow : No data available  
 Log Kow : No data available  
 Auto-ignition temperature : No data available  
 Decomposition temperature : No data available

Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
VOC content	: < 0.1 %

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Thermal decomposition may produce : carbon oxides.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

#### 10.4. Conditions to avoid

No additional information available

#### 10.5. Incompatible materials

Acids.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

C12-13 ALCOHOLS (75782-86-4)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
ethanediol, ethylene glycol (107-21-1)	
LD50 oral rat	4700 mg/kg
LD50 dermal rabbit	10626 mg/kg
ATE CLP (oral)	500.000 mg/kg body weight
ATE CLP (dermal)	10626.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. pH: 9 - 10
Serious eye damage/irritation	: Causes serious eye irritation. pH: 9 - 10
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: Causes skin irritation.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Gastrointestinal complaints.
Likely routes of exposure	: Skin and eye contact

### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

#### Additional information

Other information : No supplementary information available.

#### ADR

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

ethanediol, ethylene glycol	CAS-No. 107-21-1	3-7%
2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	CAS-No. 112-34-5	7-13%
ethanediol, ethylene glycol (107-21-1)		
Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	5000 lb	

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer, developmental and/or reproductive harm

### SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

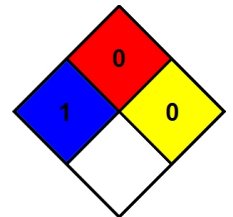
Full text of H-phrases:

H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

*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. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.*