



MATERIAL SAFETY DATA SHEET

by Tyco Fire Suppression & Building Products

ANSULITE 1X1 AR-AFFF

Product Code: 1011-2-053 SBa

Issue Date: 10-07-2011

1. Product and Company Identification

Material name ANSULITE 1X1 AR-AFFF
Version # 05
Revision date 10-07-2011
CAS # Mixture
Product Code 1011-2-053 SBa
Manufacturer / Importer / Supplier
Name Tyco Fire Protection Products
Address One Stanton Street
Marinette, WI 54143-2542
Phone 715-735-7411
Internet <http://www.ansul.com>
Emergency Phone Number CHEMTREC 800-424-9300 or 703-527-3887

2. Hazards Identification

Emergency overview Causes skin and eye irritation.
OSHA regulatory status NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Potential health effects
Routes of exposure Eye contact. Skin contact.
Skin Avoid contact with the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation May be irritating.
Ingestion Not a likely route of entry.
Target organs Eyes. Skin.
Chronic effects Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Signs and symptoms Defatting of the skin. Skin irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
ETHANOL	64-17-5	0.1 - 1
propylene glycol	57-55-6	2.5 - 10
Butyl Carbitol	112-34-5	2.5 - 10
ETHYLENE GLYCOL	107-21-1	10 - 20
Other components below reportable levels		60 - 80

4. First Aid Measures

First aid procedures
Eye contact Rinse with water.
Skin contact Get medical attention if irritation develops and persists.
Inhalation Move to fresh air. Get medical attention, if needed.
Ingestion Rinse mouth.
Notes to physician Symptoms may be delayed.
General advice If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties	This product is not flammable.
Extinguishing media	
Suitable extinguishing media	This product is not flammable. Use extinguishing agent suitable for type of surrounding fire.
Protection of firefighters	
Specific hazards arising from the chemical	None known.
Specific methods	None known.
Hazardous combustion products	May include oxides of nitrogen.

6. Accidental Release Measures

Personal precautions	Surfaces may become slippery after spillage.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
Methods for containment	Dike the spilled material, where this is possible.
Methods for cleaning up	Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Never return spills in original containers for re-use.

7. Handling and Storage

Handling	Avoid contact with skin.
Storage	Keep container tightly closed.

8. Exposure Controls / Personal Protection

Occupational exposure limits

ACGIH

Components	Type	Value	Form
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ETHANOL (64-17-5)	STEL	1000.0000 ppm	
ETHYLENE GLYCOL (107-21-1)	TWA	100.0000 mg/m3	Aerosol.

U.S. - OSHA

Components	Type	Value
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ETHANOL (64-17-5)	PEL	1000.0000 ppm 1900.0000 mg/m3
	TWA	1900.0000 mg/m3
ETHYLENE GLYCOL (107-21-1)	Ceiling	1000.0000 ppm 50.0000 ppm 125.0000 mg/m3

Engineering controls	None known.
Personal protective equipment	
Respiratory protection	Not normally needed.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin.

9. Physical & Chemical Properties

Appearance

Form	Liquid.
Color	Light yellow. Clear.

Odor	Mild. Sweet.
Physical state	Liquid.
pH	7.5
Melting point	Not available.
Freezing point	Not available.
Boiling point	Not available.
Flash point	> 176 °F (> 80 °C)
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	1.1
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.

10. Chemical Stability & Reactivity Information

Chemical stability	This is a stable material.
Conditions to avoid	None known.
Incompatible materials	Alkaline metals.
Hazardous decomposition products	Nitrogen oxides (NOx). Sulfur oxides. Carbon oxides.

11. Toxicological Information

Toxicological information	The toxicity of this product has not been tested.
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Toxicological data

Components

ETHYLENE GLYCOL (107-21-1)

Test Results

Acute Dermal LD50 Rabbit: 9530 mg/kg

Acute Oral LD50 Dog: > 8810 mg/kg

Acute Oral LD50 Guinea pig: 8200 mg/kg

Acute Oral LD50 Mouse: 14600 mg/kg

Acute Oral LD50 Rat: 6140 mg/kg

Acute Other LD50 Mouse: 5.8 g/kg

Acute Other LD50 Rat: 2800 mg/kg

Butyl Carbitol (112-34-5)

Acute Dermal LD50 Rabbit: 2700 mg/kg

Acute Oral LD50 Guinea pig: 2000 mg/kg

Acute Oral LD50 Rabbit: 2200 mg/kg

Acute Oral LD50 Rat: 6560 mg/kg

Acute Other LD50 Mouse: 850 mg/kg

Acute Other LD50 Rat: 500 mg/kg

propylene glycol (57-55-6)

Acute Oral LD50 Dog: 19000 mg/kg

Acute Oral LD50 Guinea pig: 18400 - 99999 mg/kg

Acute Oral LD50 Mouse: 23900 - 31800 mg/kg

Acute Oral LD50 Rabbit: 18000 mg/kg

Components

propylene glycol (57-55-6)

Test Results

Acute Oral LD50 Rat: 30000 mg/kg
 Acute Other LD50 Mouse: 6630 mg/kg
 Acute Other LD50 Mouse: 17.3 g/kg
 Acute Other LD50 Rat: 6423 mg/kg
 Acute Other LD50 Rat: 14 g/kg
 Acute Inhalation LC50 Mouse: 0.039 mg/l 4.00 Hours
 Acute Inhalation LC50 Rat: 20000 mg/l 10.00 Hours
 Acute Oral LD50 Dog: 5.5 g/kg
 Acute Oral LD50 Guinea pig: 5.6 g/kg
 Acute Oral LD50 Mouse: 3450 mg/kg
 Acute Oral LD50 Rat: 7060 mg/kg
 Acute Oral LD50 Rat: 6.2 g/kg
 Acute Other LD50 Mouse: 933 mg/kg
 Acute Other LD50 Rat: 1440 mg/kg

ETHANOL (64-17-5)

Local effects

Irritating to eyes. Mild skin irritation

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

ETHANOL (CAS 64-17-5)

A3 Confirmed animal carcinogen with unknown relevance to humans.

ETHYLENE GLYCOL (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

ETHANOL (CAS 64-17-5)

1 Carcinogenic to humans.

US NTP Report on Carcinogens: Known carcinogen

ETHANOL (CAS 64-17-5)

Known carcinogen.

12. Ecological Information**Ecotoxicological data****Components****Test Results**

ETHYLENE GLYCOL (107-21-1)

LC50 Fathead minnow (Pimephales promelas): 8050 mg/l 96.00 hours

Butyl Carbitol (112-34-5)

EC50 Algae: > 100 mg/l 96.00 Hours

EC50 Water flea (Daphnia magna): 3184 mg/l 24.00 hours

LC50 Bluegill (Lepomis macrochirus): 1300 mg/l 96.00 hours

propylene glycol (57-55-6)

EC50 Water flea (Daphnia magna): > 10000 mg/l 48.00 hours

LC50 Fathead minnow (Pimephales promelas): 710 mg/l 96.00 hours

ETHANOL (64-17-5)

EC50 Water flea (Daphnia magna): 7.7 - 11.2 mg/l 48.00 hours

LC50 Fathead minnow (Pimephales promelas): > 100 mg/l 96.00 hours

Ecotoxicity

Not expected to be harmful to aquatic organisms.

Environmental effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Aquatic toxicity

Not known.

Persistence and degradability

Not available.

13. Disposal Considerations**Waste from residues / unused products**

Dispose of in accordance with local regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations Not regulated.
All components are on the U.S. EPA TSCA Inventory List.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Butyl Carbitol (CAS 112-34-5)	1.0 % N230
ETHYLENE GLYCOL (CAS 107-21-1)	1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Butyl Carbitol (CAS 112-34-5)	Listed. N230
ETHYLENE GLYCOL (CAS 107-21-1)	Listed.

CERCLA (Superfund) reportable quantity

ETHANOL: 100.0000
ETHYLENE GLYCOL: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Acute Health - Yes
Chronic Health - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

ETHANOL (CAS 64-17-5) Listed: July 1, 1988 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

ETHANOL (CAS 64-17-5) Listed: October 1, 1987 Developmental toxin.

US - New Jersey Community RTK (EHS Survey): Reportable threshold

Butyl Carbitol (CAS 112-34-5)	500 LBS
ETHYLENE GLYCOL (CAS 107-21-1)	500 LBS

US - Pennsylvania RTK - Hazardous Substances: Listed substance

Butyl Carbitol (CAS 112-34-5)	Listed.
ETHYLENE GLYCOL (CAS 107-21-1)	Listed.
propylene glycol (CAS 57-55-6)	Listed.

16. Other Information

Further information	HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings	Health: 1* Flammability: 2 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 2 Instability: 1
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.
Issue date	10-07-2011
This data sheet contains changes from the previous version in section(s):	Physical & Chemical Properties Regulatory Information