COMPRESSED AIR FOAM DATASHEET

ANSUL ANSULITE 3X3 LV ALCOHOL RESISTANT AFFF MSDS

Address

SIRON Compressed Air Foam
Holterhofweg 280A
NL-7534PT Enschede
The Netherlands

Contact

Phone: +31 53 750 30 44
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Document no's

Revision: -

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the preparation

Product Name:	"ANSULITE 3x3 LOW VISCOSITY" (Alcohol Resistant AFFF Concentrate).
Chemical Name:	N/A – This is a mixture/preparation.
CAS No.:	N/A – This is a mixture/preparation.
Chemical Formula:	N/A – This is a mixture/preparation.
EINECS Number:	N/A – This is a mixture/preparation.

1.2. Use of the preparation

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

1.3. Company identification

Manufacturer/Supplier:	ANSUL INCORPORATED
Address:	One Stanton Street, Marinette, WI 54143-2542
Prepared by:	Safety and Health Department
Phone:	715-735-7411
Internet/Home Page:	http://www.ansul.com
Date of Issue:	September, 2006

1.4. Emergency telephone

CHEMTREC 800-424-9300 or 703-527-3887

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1.

Ingredient Name:	Proprietary mixture consisting of hydrocarbon surfactants, fluorosurfactants, inorganic salts, high molecular weight polysaccarides, and water. Not otherwise specified.
Chemical Formula:	N/A – This is a mixture/preparation.
CAS No.:	N/A – This is a mixture/preparation.
EINECS Number:	N/A – This is a mixture/preparation.
Concentration, Wt %:	>85 %.
Hazard Identification:	See Heading 3.

Ingredient Name:	Diethylene Glycol Monobutyl Ether (a).
Chemical Formula:	$C_4H_9O(CH_2CH_2O)_2H$.
CAS No.:	112-34-5.
EINECS Number:	203-961-6.
Concentration, Wt %:	10 %.
Hazard Identification:	See Heading 3.

Ingredient Name:	Tertiary Butyl Alcohol.
Chemical Formula:	$(CH_3)_3COH$.
CAS No.:	75-65-0.
EINECS Number:	200-889-7.
Concentration, Wt %:	0.95 %.
Hazard Identification:	See Heading 3.

Ingredient Name:	Hexylene Glycol (2-Methylpentane-2,4-diol).
Chemical Formula:	$C_6H_{14}O_2$.
CAS No.:	107-41-5.
EINECS Number:	203-489-0.
Concentration, Wt %:	0.4 %.
Hazard Identification:	See Heading 3.

Ingredient Name:	Dowicide A.
Chemical Formula:	$C_{12}H_{10}ONa$.
CAS No.:	132-27-4.
EINECS Number:	205-055-6.
Concentration, Wt %:	0.015 %.
Hazard Identification:	See Heading 3.

(a) This chemical is subject to reporting requirements of SARA Title III Section 313 and 40 CFR Section 372.

NOTE: Unless a component presents a severe hazard, it does not need to be considered in the MSDS if the concentration is less than 1%. [According to Directive 1999/45/EC.]

3. HAZARDS IDENTIFICATION

FOR HUMANS:
Product:

EU Classification:	Irritant - Xi.	
R Phrases:	36	Irritating to eyes.
S Phrases:	2	Keep out of the reach of children.
	24	Avoid contact with skin.
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Components:
Diethylene Glycol Monobutyl Ether:

EU Classification:	Irritant - Xi.	
R Phrases:	36	Irritating to eyes.
S Phrases:	2	Keep out of the reach of children.
	24	Avoid contact with skin.
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Limit Values for Exposure:
Diethylene Glycol Monobutyl Ether:

OSHA PEL (General Industry) 8 hour TWA:	None established.
MAK (DE) Limit value:	100 mg/m^3.
Short term exposure limit value (8 times, 5 minutes):	200 mg/m^3.

Neither this preparation nor the substances contained in it have been listed as carcinogenic by National Toxicology Program, I.A.R.C., or OSHA.

AS PART OF GOOD INDUSTRIAL AND PERSONAL HYGIENE AND SAFETY PROCEDURE, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes, and clothing.

SIGNS AND SYMPTOMS:

Acute Exposure:	
Eye Contact:	May cause mild transient irritation.
Skin Contact:	May cause mild transient irritation and/or dermatitis.
Inhalation:	Not an expected route of entry.
Ingestion:	Irritating to mucous membranes. Large oral doses could produce narcosis.
Chronic Overexposure:	Kidney, liver, gastrointestinal, and spleen. Did not interfere with reproduction. However, body weights of newborn animals were decreased.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Diseases of the kidney and liver.

FOR ENVIRONMENT:
As much as possible, keep from being washed into surface waters. See Heading 12.

4. FIRST AID MEASURES

Eye Contact:	Flush with large amounts of water. If irritation persists, seek medical attention.
Skin Contact:	Wash thoroughly with soap and water. If irritation persists, seek medical attention.
Inhalation:	Move to fresh air. Seek medical attention if discomfort continues.
Ingestion:	If patient is conscious, give large quantities of water and induce vomiting. Seek medical attention.

5. FIRE-FIGHTING MEASURES

This preparation is an extinguishing media.
There are NO extinguishing media which must not be used for safety reasons.
NO special protective equipment is needed for fire-fighters.

6. ACCIDENTAL RELEASE MEASURES

For personal protection: Prevent skin and eye contact, see Heading 8.
Clean up: Use an absorbent material such as diatomaceous earth, sawdust, etc., and sweep up, see Heading 13.
As much as possible, keep from being washed into surface waters. See Heading 12.

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7. HANDLING AND STORAGE

7.1. Handling

Care should be taken in handling all chemical substances and preparations.
See incompatibility information in Heading 10.

7.2. Storage

NO special conditions are needed for safe storage.
See incompatibility information in Heading 10.
Store in original container. Keep tightly closed until used.
As much as possible, keep from being washed into surface water. See Heading 12.

7.3. Specific use

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure limit values

Limit Values for Exposure:

Diethylene Glycol Monobutyl Ether:

OSHA PEL (General Industry) 8 hour TWA:	None established.
MAK (DE) Limit value:	100 mg/m^3.
Short term exposure limit value (8 times, 5 minutes):	200 mg/m^3.

8.2. Exposure controls

8.2.1. Occupational exposure controls

8.2.1.1. Respiratory protection

None expected to be needed. Mechanical ventilation is recommended.

8.2.1.2. Hand protection

Use chemical resistant gloves when handling the preparation.

8.2.1.3. Eye protection

Chemical goggles are recommended.

8.2.1.4. Skin protection

Standard fire fighting equipment should provide all protection which is necessary.

8.2.2. Environmental exposure controls

As much as possible, keep from being washed into surface water. See Heading 12.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

Appearance:	Gelled liquid.
Odor:	Mild, sweet odor.

9.2. Important health, safety, and environmental information

pH:	6.5 to 8.5.
Boiling point/boiling range:	>100 °
Flash point:	None to boiling.
Flammability (solid/gas):	Not flammable.
Explosive properties:	Not explosive.
Oxidizing properties:	Not an oxidizer.
Vapor Pressure:	Not determined.
Relative Density (Water = 1):	1.00.
Solubility:	
– Water solubility:	Completely soluble.
– Fat solubility:	Not determined.
Partition coefficient, n-octanol/water:	Not determined.
Viscosity:	Not determined.
Vapor density (Air = 1):	<1.
Evaporation rate (Butyl acetate = 1):	Approximately 0.005.

9.3. Other information

Auto-ignition temperature:	Does not ignite.

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10. STABILITY AND REACTIVITY

10.1. Conditions to avoid

There are NO known conditions such as temperature, pressure, light, shock, etc., which may cause a dangerous reaction.

10.2. Materials to avoid

Reactive metals, electrically energized equipment, any material reactive with water, and strong oxidizers.

10.3. Hazardous decomposition products

Normally stable.

Hazardous polymerization will NOT occur.

Combustion or decomposition products are not known, oxides of nitrogen and sulfur may be found. Hydrogen sulfide may be produced under anaerobic bacterial decomposition.

11. TOXICOLOGICAL INFORMATION

Product: The toxicity of the product mixture has not been determined.

Components:

Diethylene glycol monobutyl ether:

Toxicity Data:	Oral (rat) LD_{50}	5,660 mg/kg.	[Dow Chemical Co.].
	Oral (rat) LD_{50}	9,623 mg/kg.	[EINICS ESIS].
	Dermal (rabbit) LD_{50}	4,000 mg/kg.	[Dow Chemical Co.].
	Dermal (rabbit) LD_{50}	2,764 mg/kg.	[EINICS ESIS].
Irritation Data:	Eye (rabbit)	20 mg/24 hrs. Moderate.	[EINICS ESIS].
	Eye (rabbit) Draize test	Highly irritating.	[EINICS ESIS].
	Skin (rabbit)	1000 mg/kg/day Moderate with edema, fissuring, and leathery appearance.	[EINICS ESIS].
Target organs:	Kidney, blood, liver, lungs, gastrointestinal, spleen.		

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Components:

Diethylene glycol monobutyl ether:

Fish,	Lepomis marcrochinus:	LC_{50} (96 hrs)	1,300 mg/L.
	Carrassius auratus:	LC_{50} (24 hrs)	2,700 mg/L.
Daphnids,	Daphnia magna:	EC_{50} (24 hrs)	3,184 mg/L.
Algae,	Scenedesmus subspicatus:	EC_{50} (96 hrs)	>100 mg/L.

12.2. Mobility

Diethylene glycol monobutyl ether:

Should not partition from a water column to organic matter contained in sediments and suspended solids.

12.3. Persistence and degradability

Diethylene glycol monobutyl ether:

Indirect photodegradation is about 50 % in 3.5 hours.

Aerobic degradation with adapted activated sludge is 60 % after 28 days.

COD = 2080 mg/g substance.

BOD5 = 250 mg O_2/g substance.

Theoretical oxygen demand = 2.17 mg/mg.

12.4. Bioaccumulative potential

Diethylene glycol monobutyl ether:

Should not bioaccumulate. Estimated bioaccumulation factor (log BCF) = 0.46.

12.5. Other adverse effects

Ozone depletion potential:	None.
Photochemical ozone creation potential:	None
Global warming potential:	None

13. DISPOSAL CONSIDERATIONS

As much as possible, keep from being washed into surface water. See Heading 12.

Dispose of in compliance with national, regional, and local provisions that may be in force.

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14. TRANSPORT INFORMATION

Hazard Class or Division: Not hazardous.
For additional transport information, contact Ansul Incorporated.
As much as possible, keep from being washed into surface water. See Heading 12.

15. REGULATORY INFORMATION

EU Classification: Irritant - Xi.

R Phrases:	36	Irritating to eyes.
S Phrases:	2	Keep out of the reach of children.
	24	Avoid contact with skin.
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Exposure Limit Values:
Diethylene Glycol Monobutyl Ether:

OSHA PEL (General Industry) 8 hour TWA:	None established.
MAK (DE) Limit value:	100 mg/m^3.
Short term exposure limit value (8 times, 5 minutes):	200 mg/m^3.

EINECS Status: All components are included in EINECS inventories or are exempt from listing.
EPA TSCA Status: All components are included in TSCA inventories or are exempt from listing.
Canadian DSL (Domestic Substances List): All components are included in the DSL or are exempt from listing.

Environmental restrictions: None are known.
Restrictions on Marketing and Use: None are known.
Refer to any other national measures that may be relevant.

16. OTHER INFORMATION

(HMIS) HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

HEALTH:	1	4. Severe Hazard
FLAMMABILITY:	0	3. Serious Hazard
REACTIVITY:	0	2. Moderate Hazard
		1. Slight Hazard
		0. Minimal Hazard

(WHMIS) CANADIAN WORKPLACE HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:
This product is rated **D2B – Product may irritate eyes, skin or mucous membrane.**

Format is from directive 2001/58/EC.
EINECS data is from http://exb.jrc.it/existing-chemicals/
Data used to compile the data sheet is from Ansul Material Safety Data Sheet, February, 2002.
The EU Classification has been changed in accordance with Directive 1999/45/EC and information in the EINICS ESIS files (Existing Substances Information System).
Toxicological information added from the EINICS ESIS (Existing Substances Information System) and from Dow Chemical Company.
A rating under WHMIS has been added, following the Canadian guidelines.
Limit values for exposure for diethylene glycol monobutyl ether were changed, based on EINICS ESIS data.

17. DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ANSUL SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

N/A = Not Applicable NDA = No Data Available

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