



Safety Data Sheet

according to 2001/58/EC

towalex AFFF 3% UL

Product code: 655006-3UL

Print date: 27.11.2003

Revision date: 30.10.2003

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1. Identification of the substance/preparation and company

1.1 Commercial product name: towalex AFFF 3% UL
Product code: 655006-3UL
Product group: blowing agent

Use of the substance/preparation

Fire extinguishing agent: blowing agent, liquid concentrate

1.2 Information manufacturer/supplier

TOTAL WALTHER Feuerschutz Löschmittel GmbH
Industriestraße 11
D68526 Ladenburg
Telephone : +49/(0)6203/934-0
Telefax : +49/(0)6203/934-150
Contact person : Dr. Th. Leonhardt Telephone : -299
e-mail : info@tycoint.com

Inquiry office : Laboratory

Emergency telephone number : +49/(0)6203/934-112

Additional information

liquid concentrate for the production of foam for fire fighting

2. Composition/information on ingredients

Chemical characterization : (preparation)

Hazardous components

(Full text of each relevant R phrase can be found in heading 16)

EC No.	CAS No.	Components	Value	Symbols	R-phrases
203-473-3	107-21-1	1,2-Ethandiole	10-30 %	Xn R22	
203-961-6	112-34-5	2-(2-butoxyethoxy)-ethanol	15-30 %	Xi R36	

3. Hazards identification

Classification

Symbols : Irritant

R-phrases :

Irritating to eyes.

Explication of special hazards for human health and environment

Within expanded foam respiration is not possible, danger of suffocation!

4. First aid measures

General information

Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use.

After inhalation

In case of shortness of breath, give oxygen. Keep under medical supervision for at least 48 hours. Show this safety data sheet to the doctor in attendance. No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.



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After contact with skin

Wash off with warm water.

After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion

Remove from exposure, lie down. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). No artificial aspiration mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media that must not be used for safety reasons

None known.

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

None known.

Special protective equipment for firefighters

No special technical protective measures required.

Additional information

No special protective measures against fire required

6. Accidental release measures

Personal precautions

Use personal protective equipment. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Environmental precautions

Dam up. Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up/taking up

Wipe up with absorbent material (e.g. cloth, fleece). Take up mechanically and collect in suitable container for disposal.

7. Handling and storage

7.1 Handling

Advice on safe handling

Use working solution immediately - Do not store. Never mix concentrates directly. Never return unused material to storage receptacle

Advice on protection against fire and explosion

No special handling advice required

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7.2 Storage

Requirements for storage rooms and vessels

Store at room temperature in the original container. Freezing will affect the physical condition but will not damage the material. Thaw and mix before using.

Further information on storage conditions

Keep container tightly closed.

8. Exposure controls/personal protection

8.1 Exposure limit values

Exposure limits (EH40)

Components CAS No.	Exposure limit ml/m ³	mg/m ³	F/ml	Category	Origin
Ethylene glycol (ethane-1,2-diol) (vapour) 107-21-1	-	52		TWA (8 h)	OES
	-	104		STEL (15 min)	OES

8.2 Exposure controls

Protective and hygiene measures

Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Keep away from food, drink and animal feeding stuffs. When using do not eat or drink.

Respiratory protection

not required under normal use; May be harmful by inhalation (after often repeated exposure).

Hand protection

impervious gloves

Eye protection

safety glasses with side-shields

Body protection

Avoid contact with skin.

9. Physical and chemical properties

9.1 Appearance

Form: liquid
 Colour: light yellow -amber
 Odour: slightly soapy

9.2 Important health, safety and environmental information

pH Value (at 20 °C)	7,2-8,5	Test method
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Changes in the physical state

Boiling point:	100 °C
Sublimation point:	no data available °C
Softening point:	no data available °C
Stock point	-20 °C



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Flash point:	>90 °C	DIN 51758
Flammability		
Vapour pressure: (at 20 °C)	no data available	hPa
(at 100 °C)		
Density: (at 20 °C)	1,04-1,045 g/cm ³	DIN 12793
Water solubility: (at 20 °C)	completely miscible	g/l
(at 20 °C)		
(at 20 °C)		
Flow time: (at 20 °C)	no data available	

9.3 Other information

Autoignition temperature

10. Stability and reactivity

Materials to avoid

strong oxidising agents strong acids and strong bases

Hazardous decomposition products

No decomposition if stored and applied as directed.

11. Toxicological information

Acute toxicity

None known.

Specific effects in experiment on an animal

None known.

Irritancy and corrosiveness

The liquid splashed in the eyes may cause irritation and reversible damage.

Sensitising effect

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Subacute, subchronic and prolonged toxicity

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Carcinogenicity, mutagenicity and reproductive toxicity

None known.

Additional information on tests

No persistent or cumulative effects were observed.

Empirical data on effects on humans

Ingestion may cause irritation to mucous membranes. May cause eye or skin irritation with susceptible persons.

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12. Ecological information

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Persistence and degradability

Chemical oxygen demand (COD) 24.000mg O₂/ltr (3% sln.)

Biochemical oxygen demand within 5 days (BOD₅) = 17.000mg O₂/ltr (3% sln.)

Bioaccumulative potential

Does not bioaccumulate. Ecological injuries are not known or expected under normal use.

Other adverse effects

slightly water contaminating

Additional information

Waste water from subsequent processing should be given appropriate treatment in line with regulations of local sewerage undertaking or the NRA.

13. Advice on disposal

Dispose

If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. The following Waste Codes are only suggestions: 07 06 99

14. Transport information

14.1 Land transport (ADR/RID)

Warnings plate :

Description of the goods:

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

14.2 Inland waterways transport

Description of the goods

Not dangerous goods

14.3 Marine transport

Description of the goods

Not dangerous goods

14.4 Air transport

Description of the goods

Not dangerous goods



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14.5 Further Information

15. Regulatory information

15.1 Labelling

Indication of danger

Xi - Irritant

Labelling according to EC-guidelines

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

R phrases

36

Irritating to eyes.

Additional information

Classification according to European directive on classification of hazardous preparations 1999/45/EC. Safety datasheet available on request for professional users.

15.2 National regulations

Water contaminating class: 1 - slightly water contaminating

16. Other information

List of relevant R phrases

22

Harmful if swallowed.

36

Irritating to eyes.

Other data

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.
