



**Safety Data Sheet**  
according to 2001/58/EC  
**towalex AFFF 3% EX**  
Product code: 655008-Ex3

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% EX  
Product code: 655008-Ex3  
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
203-961-6	112-34-5	2-(2-butoxyethoxy)-ethanol	15-30 %	Xi	R36

**3. Hazards identification**

**Classification**

Symbols : Irritant

R-phrases :

Risk of serious damage 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.

**After contact with skin**

Wash off with warm water.



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**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

**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.



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**Further information on storage conditions**  
Keep container tightly closed.

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## **8. Exposure controls/personal protection**

### **8.1 Exposure limit values**

### **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.

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## **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**

		Test method
pH Value (at 20 °C)	6,0-7,8	

#### **Changes in the physical state**

Boiling point:	100 °C	
Sublimation point:	no data available	°C
Softening point:	no data available	°C
Stock point	0 - -2	°C

Flash point:	no data available	°C	DIN 51758
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Flammability

Vapour pressure: (at 20 °C)	no data available	hPa	
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(at 100 °C) Density: (at 20 °C)	1,025-1,03	g/cm <sup>3</sup>	DIN 12793
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Water solubility: (at 20 °C)	completely miscible	g/l	
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(at 20 °C)

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(at 20 °C)

Flow time:

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.

### 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) 20.000mg O<sub>2</sub>/ltr (3% sln.)

Biochemical oxygen demand within 5 days (BOD<sub>5</sub>) = 17.000mg O<sub>2</sub>/ltr (3% sln.)

#### Bioaccumulative potential

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



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#### 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, ADNR, 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

#### 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

41

Risk of serious damage to eyes.



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#### S phrases

26-39

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
Wear eye/face protection.

#### 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

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#### 16. Other information

##### List of relevant R phrases

36 Irritating to eyes.  
41 Risk of serious damage 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.

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