

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 09/02/2012 Revision date: 22/08/2017 Supersedes: 20/04/2015 Version: 1.2

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

**Product identifier** 

Product form : Mixture

Product name : TF6 Training Foam

Product code : FC 01 32

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Training foam

1.2.2. Uses advised against No additional information available

Details of the supplier of the safety data sheet

ANGUS FIRE Ltd Station Road Bentham LA2 7NA - United Kingdom T +44 1524 264000 - F +441524 264180 general.enquiries@angusuk.co.uk - www.angusfire.co.uk

**Emergency telephone number** 

: T +44(0) 1524 264000 (Standard office hours: Monday to Friday 8:30am - 4:30pm GMT) **Emergency number** 

Contact person: EH&S Manager

### **SECTION 2: Hazards identification**

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**EUH-statements** : EUH210 - Safety data sheet available on request

Other hazards

PBT: not relevant - no registration required vPvB: not relevant - no registration required

## **SECTION 3: Composition/information on ingredients**

**Substances** 

Not applicable

Mixtures 3.2.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methyl-2,4-pentanediol	(CAS-No.) 107-41-5 (EC-No.) 203-489-0 (EC Index-No.) 603-053-00-3 (REACH-no) 01-2119539582-35	1 - 4	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H-statements: see section 16

22/08/2017 EN (English) 1/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## **SECTION 4: First aid measures**

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

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.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

No additional information available

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 : No specific measures are necessary. This product is a fire extinguishing medium.

Unsuitable extinguishing media : Not applicable.

5.2. Special hazards arising from the substance or mixture

Fire hazard : No fire hazard.

5.3. Advice for firefighters

Firefighting instructions : Not applicable.

Protection during firefighting : Not applicable.

#### **SECTION 6: Accidental release measures**

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection"."

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage. Store away from other materials.

6.4. Reference to other sections

8. Exposure controls/personal protection. 13. Disposal considerations.

## **SECTION 7: Handling and storage**

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Wear recommended personal protective equipment. Read

and follow manufacturer's recommendations. Handle in accordance with good industrial

hygiene and safety procedures.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store at temperatures not exceeding

60°C (140°F) (intermittent). Protect from freezing. Keep/Store away from incompatible

materials.

7.3. Specific end use(s)

Training foam.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

2-methyl-2,4-pentanediol (107-41-5)		
EU	IOELV TWA (mg/m³)	123 mg/m³

22/08/2017 EN (English) 2/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2-methyl-2,4-pentanediol (107-41-5)		
EU	IOELV TWA (ppm)	25 ppm
EU	IOELV STEL (mg/m³)	123 mg/m³
EU	IOELV STEL (ppm)	25 ppm
Belgium	Limit value (mg/m³)	123 mg/m³ (1,6-Hexanediol; Belgium; Time-weighted average exposure limit 8 h)
Belgium	Limit value (ppm)	25 ppm (1,6-Hexanediol; Belgium; Time-weighted average exposure limit 8 h)
France	VLE (mg/m³)	125 mg/m³ (Hexylèneglycol; France; Short time value; VL: Valeur non réglementaire indicative)
France	VLE (ppm)	25 ppm (Hexylèneglycol; France; Short time value; VL: Valeur non réglementaire indicative)
United Kingdom	WEL TWA (mg/m³)	123 mg/m³ 2-Methylpentane-2,4-diol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL TWA (ppm)	25 ppm 2-Methylpentane-2,4-diol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (mg/m³)	123 mg/m³ 2-Methylpentane-2,4-diol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
United Kingdom	WEL STEL (ppm)	25 ppm 2-Methylpentane-2,4-diol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
USA - ACGIH	ACGIH Ceiling (ppm)	25 ppm (Hexylene glycol; USA; Momentary value; TLV - Adopted Value)

#### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure adequate ventilation. Follow the exposure limits given on this material safety data sheet.

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Hand protection:

Wear protective gloves (butyl rubber)

#### Eye protection:

Chemical goggles or safety glasses

## Skin and body protection:

Wear suitable protective clothing

## Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment (A2/P2).

#### Thermal hazard protection:

Wear thermal protective clothing, when necessary.

## Environmental exposure controls:

Contain spills. Prevent releases. Observe national regulations on emissions. Ensure all national/local regulations are observed.

#### Other information:

Do not eat, drink or smoke when using this product.

## SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Dark brown.
Odour : Characteristic.
Odour threshold : No data available

pH : 6.5 - 8

Relative evaporation rate (butylacetate=1) : No data available

22/08/2017 EN (English) 3/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Melting point: No data availableFreezing point: No data availableBoiling point: No data availableFlash point: > 100 °C

Auto-ignition temperature : No data available Decomposition temperature : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available Relative vapour density at 20 °C : No data available Relative density No data available Density 1.11 - 1.14 Solubility : No data available Log Pow : No data available

Viscosity, kinematic : 7 cSt

Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is stable and non reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Incompatible materials. Extremely high or low temperatures.

### 10.5. Incompatible materials

Alkali metals. Oxidizing agent. Water reactive substances.

#### 10.6. Hazardous decomposition products

Carbon oxides. Sulphur oxides. Hydrogen fluoride. Nitrogen oxides (NOx). Sodium oxides.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

2-methyl-2,4-pentanediol (107-41-5)	
LD50 oral rat	3700 mg/kg (Rat; OECD 420; Experimental value; > 2000 mg/kg bodyweight; Rat)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: acute dermal toxicity)
LD50 dermal rabbit	> 8000 mg/kg (Rabbit)

Skin corrosion/irritation : Not classified

pH: 6.5 - 8

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified pH: 6.5 - 8

Additional information : Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

22/08/2017 EN (English) 4/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

TF6 Training Foam

Viscosity, kinematic 7 mm²/s

Potential adverse human health effects and : Based on available data, the classification criteria are not met.

symptoms

## SECTION 12: Ecological information

#### 12.1. Toxicity

2-methyl-2,4-pentanediol (107-41-5)	
LC50 fish 1	12800 mg/l (96 h; Lepomis macrochirus)
LC50 fish 2	9450 mg/l (96 h; Oncorhynchus mykiss)
LC50 other aquatic organisms 1	10 - 100 mg/l (96 h)
EC50 Daphnia 1	5410 mg/l (48 h; Daphnia magna)
EC50 Daphnia 2	3300 mg/l (48 h; Daphnia pulex)
Threshold limit other aquatic organisms 1	10 - 100,96 h
Threshold limit algae 1	> 429 mg/l (72 h; Pseudokirchneriella subcapitata)

#### 12.2. Persistence and degradability

2-methyl-2,4-pentanediol (107-41-5)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O₂/g substance
Chemical oxygen demand (COD)	2.2 g O₂/g substance
ThOD	2.3 g O₂/g substance
BOD (% of ThOD)	0.01

### 12.3. Bioaccumulative potential

TF6 Training Foam	
Bioaccumulative potential	The product is not expected to bioaccumulate.

2-methyl-2,4-pentanediol (107-41-5)	
Log Pow	0.58 (QSAR)
Bioaccumulative potential	Low bioaccumulation potential.

#### 12.4. Mobility in soil

2-methyl-2,4-pentanediol (107-41-5)	
Surface tension	0.033 N/m
Log Koc	Koc,Other; 1; Calculated value

#### 12.5. Results of PBT and vPvB assessment

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TF6 Training Foam	TF6 Training Foam
PBT: not relevant – no registration required	PBT: not relevant – no registration
vPvB: not relevant – no registration required	vPvB: not relevant – no registration

### 12.6. Other adverse effects

Other adverse effects : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

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

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 16 03 05\* - organic wastes containing dangerous substances

22/08/2017 EN (English) 5/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

**IMDG** 

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

**RID** 

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No Marine pollutant : No

Other information : No supplementary information available

## 14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

22/08/2017 EN (English) 6/7

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

## **SECTION 15: Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. **EU-Regulations** 

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. **National regulations** 

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex

12th Ordinance Implementing the Federal

Immission Control Act - 12.BImSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

**Netherlands** 

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: None of the components are listed

#### **Chemical safety assessment**

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE Data sources

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

Other information : None

Full text of H- and EUH-statements	s:
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation
H319	Causes serious eye irritation
EUH210	Safety data sheet available on request

SDS EU (REACH Annex II) - Angus Fire

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

22/08/2017 EN (English) 7/7