SAFETY DATA SHEET

FOAM SAMPLES: SYNTHETIC (AFFF, AFFF-LF, AFFF-AR)

Compilation date: 12/08/2015

Revision No: 1

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: FOAM SAMPLES: SYNTHETIC (AFFF, AFFF-LF, AFFF-AR)

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

Use of substance / mixture: Mixture of Synthetic Fire Fighting Foam Concentrates and diluted/produced samples for laboratory testing and evaluation. The information included on this document is only intended to cover a broad range of potential physical characteristics and properties for the many kinds of foam concentrates in circulation on the market.

1.3. Details of the supplier of the safety data sheet

Company name: Oil Techics Ltd
Lintons Business Park
Gourdon
Aberdeenshire
DD10 0NH
United Kingdom, Scotland
Tel: +44 (0) 1561 361515
Email: info@oiltechnics.com

1.4. Emergency telephone number

Emergency tel: +44 (0) 1561 361515
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R36

Classification under CLP: Eye Dam. 1: H318

Most important adverse effects: Irritating to eyes.

2.2. Label elements

Label elements under CLP:

Hazard statements: H318: Causes serious eye damage.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.

[cont...]

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

Label elements under CHIP:

Hazard symbols: Irritant.

Risk phrases: R36: Irritating to eyes.

2.3. Other hazards

Other hazards: Irritating to skin.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

ETHYLENE GLYCOL - REACH registered number(s): 01-2119456816-28-XXXX

EINECS	CAS	CHIP Classification	CLP Classification	Percent
203-473-3	107-21-1	Xn: R22	Acute Tox. 4: H302	10-20%

2-METHYLPENTANE-2,4-DIOL

203-489-0	107-41-5	Xi: R36/38	Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-5%

2-(2-BUTOXYETHOXY)ETHANOL - REACH registered number(s): 01-2119475104-44

203-961-6	112-34-5	Xi: R36	Eye Irrit. 2: H319	1-5%

ALKYLPOLYGLYCOSIDE C9-11

603-654-0	132778-08-06	Xi: R41	Eye Dam. 1: H318	1-5%

SODIUM DECYL SULPHATE

-	-	Xn: R22; Xi: R38; Xi: R41	Acute Tox. 4: H302; Aquatic Chronic 3: H412; Skin Irrit. 2: H315; Eye Dam. 1: H318	1-5%

SODIUM OCTYL SULPHATE

205-535-5	142-31-4	Xi: R38; Xi: R41	Skin Irrit. 2: H315; Eye Dam. 1: H318	1-5%

Non-classified ingredients:

[cont...]

WATER

EINECS	CAS	CHIP Classification	CLP Classification	Percent
-	7732-18-5	-	-	60-80%

Contains: Contains fluorinated carbon molecules as the primary (fluoro) surfactant.
Oil Technics Ltd takes no responsibility as to whether the foam samples pertinent to this shipment comply with the EPA 2015 Product Stewardship programme, relating to the use of C6 fluorosurfactant and the removal of PFOA and PFOS from the market.

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

[cont...]

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

ETHYLENE GLYCOL

Workplace exposure limits: **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	52 mg/m3 (vapour)	104 mg/m3 (vapour)	-	-

2-METHYLPENTANE-2,4-DIOL

UK	123 mg/m3	123 mg/m3	-	-

[cont...]

2-(2-BUTOXYETHOXY)ETHANOL

UK	67.5 mg/m3	101.2 mg/m3	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Yellow-brown

Odour: Perceptible odour

Evaporation rate: Moderate

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Viscosity: Viscous

Boiling point/range°C: >100 **Flash point°C:** >93

Relative density: 1.0-1.3 **pH:** 6-8.5

9.2. Other information

Other information: Potential for mixture of different foam concentrate types resulting in varying physical properties.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

[cont...]

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ETHYLENE GLYCOL

IVN	RAT	LD50	3260	mg/kg
ORL	MUS	LD50	5500	mg/kg
ORL	RAT	LD50	4700	mg/kg

2-METHYLPENTANE-2,4-DIOL

IPR	RAT	LDLO	1500	mg/kg
ORL	MUS	LD50	3097	mg/kg
ORL	RAT	LD50	3700	mg/kg

2-(2-BUTOXYETHOXY)ETHANOL

ORL	MUS	LD50	6050	mg/kg
ORL	RAT	LD50	4500	mg/kg

ALKYLPOLYGLYCOSIDE C9-11

ORAL	HMN	LD50	>2000	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

[cont...]

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

ALKYLPOLYGLYCOSIDE C9-11

FISH	96H LC50	10	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

[cont...]

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H412: Harmful to aquatic life with long lasting effects.

R22: Harmful if swallowed.

R36/38: Irritating to eyes and skin.

R36: Irritating to eyes.

R38: Irritating to skin.

R41: Risk of serious damage to eyes.

Legend to abbreviations: PNEC = predicted no effect level

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

EC50 = median effective concentration

IC50 = median inhibitory concentration

dw = dry weight

bw = body weight

cc = closed cup

oc = open cup

MUS = mouse

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

SCU = subcutaneous

SKN = skin

DRM = dermal

OCC = ocular/corneal

PCP = phycico-chemical properties

Legal 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. This company shall not be held liable for any damage resulting from handling or from contact with the above product. Oil Technics Ltd takes no responsibility for the samples sent along with this SDS in shipment. This SDS is intended for use only as a substitute to the SDS supplied by the foam concentrate manufacturer. If an SDS is available from the manufacturer of the foam, it should be used in place of this SDS.