



Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)/(EU) 2020/878

## MOUSSOL<sup>®</sup>-APS 1/3 F-15 #3472



	Product identifier <b>MOUSSOL<sup>®</sup>-APS 1/3</b> UFI: 53M9-G07A-Q00V-HSS4	F-15 #3472			
	UFI: 53M9-GU/A-QUUV-H554				
1.2	Relevant identified uses of the s	substance or mixture and uses advised against			
	Use of the substance/mixture Fire-extinguishing foam				
1.3	Details of the supplier of the saf	fety data sheet			
	Manufacturer	Fabrik chemischer Präparate von Dr. R. Sthamer GmbH & Co. KG			
	Street	Liebigstraße 5			
	Postal code/City	D-22113 Hamburg			
	Country	Deutschland			
	Telephone	+49 (0)40/736168-0			
	Telefax	+49 (0)40/736168-60			
	E-mail (competent person)	labor@sthamer.com			
	Website	http://sthamer.com			
	Department responsible for information	Dr. Prall, +49 (0)40/736168-31			
	Emergency telephone number	+49 (0)40/736168-0			
1.4	Emergency telephone number				
	GIZ-Nord Poisons Centre of the University of Gö	ttingen +49 (0)551/1924			

2.1	Classification of the Classification according to R Eye Irrit. 2 H319			
2.2	Label elements			
	Labelling according to Regul	ation (EC) No. 1272/2008	[CLP]	
	Hazard pictograms		(!)	
	Signal word	WARNING	•	
	Hazard statements	H319	Causes serious eye irritation.	
	Precautionary statements	P262	Do not get in eyes, on skin, or on clothing.	
		P280	Wear protective gloves/protective clothing/ey protection/	e protection/face protection/hearing
		P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT indu	ice vomiting.
		P303+P361+P353	IF ON SKIN (or hair): Take off immediately a water [or shower].	I contaminated clothing. Rinse skin with
		P305+P351+P338	IF IN EYES: Rinse cautiously with water for s	everal minutes. Remove contact lenses,
ovicion	lata: 20.06.2022		Vorsion: V/00	Boplacos: 16.05.2023 ()//





if present and easy to do. Continue rinsing.

**Classification procedure** 

Bridging principle "Substantially similar mixtures".

2.3	Other hazards
<b>2</b> .J	Endocrine disrupting properties
	Preparation related information
	There are no data available on the mixture itself.
	Information on ingredients
	1,2-ETHANDIOL:
	This substance does not have endocrine disrupting properties with respect to humans. 2-(2-BUTOXYETHOXY)ETHANOL:
	This substance does not have endocrine disrupting properties with respect to humans.
	This substance does not have endocrine disrupting properties with respect to humans.
	DECYLSULFATE:
	This substance does not have endocrine disrupting properties with respect to humans. ALKYLPOLYGLYCOSIDE:
	This substance does not have endocrine disrupting properties with respect to humans. 2-METHYLPENTANE-2,4-DIOL:
	This substance does not have endocrine disrupting properties with respect to humans. FLUOROSURFACTANT:
	This substance does not have endocrine disrupting properties with respect to humans. INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
	This substance does not have endocrine disrupting properties with respect to humans.
	Results of PBT and vPvB assessment
	Preparation related information
	There are no data available on the mixture itself.
	Information on ingredients 1,2-ETHANDIOL:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. 2-(2-BUTOXYETHOXY)ETHANOL:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
	OCTYLSULFATE:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. DECYLSULFATE:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. ALKYLPOLYGLYCOSIDE:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. 2-METHYLPENTANE-2,4-DIOL:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
	FLUOROSURFACTANT:
	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
	INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
	The data refer to the product as delivered. The solutions for use produced according to dilution recommendations are to be classified differently.
	Can harm the aquatic fauna when entering surface waters.
	Can harm the bacteria population in waste water treatment plants when entering the sewerage system.
	Breathing is not possible whilst submerged in the foam. Take care when spraying people!
	The product contains fluorosurfactants that are not completely biodegradable.
	Concentrated surfactant solutions always pose a danger to aquatic life because they greatly reduce the surface tension of water thus disrupting
	all life processes associated with it. In sewage treatment plants, for example, the necessary aeration of the sewage stages can be hindered by the strong foam formation.

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

### 3.1 Substances



not applicable

## 3.2 Mixtures

1,2-ETHANDIOL CAS No.: 107-21-1 EC No.: 203-473-3 REACH No.: 01-2119456816-28-XXXX Concentration: 5 - 10% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS07-GHS08; Acute Tox. 4-STOT RE 2; H302-H373.8

#### 2-(2-BUTOXYETHOXY)ETHANOL

CAS No.: 112-34-5 EC No.: 203-961-6 REACH No.: 01-2119475104-44-XXXX Concentration: 5 - 10% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS07; Eye Irrit. 2; H319

### OCTYLSULFATE

CAS No.: 142-31-4 EC No.: 205-535-5 REACH No.: 01-2119966154-35-XXXX Concentration: 1 - 5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS05; Skin Irrit. 2-Eye Dam. 1; H315-H318

## DECYLSULFATE

CAS No.: 142-87-0 EC No.: 205-568-5 REACH No.: 01-2119970328-30-XXXX Concentration: 0,25 - 2,5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS05-GHS07; Acute Tox. 4-Skin Irrit. 2-Eye Dam. 1-Aquatic Chronic 3; H302-H315-H318-H412

#### ALKYLPOLYGLYCOSIDE

CAS No.: 68515-73-1 EC No.: 500-220-1 REACH No.: 01-2119488530-36-XXXX Concentration: 1 - 5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS05; Eye Dam. 1; H318

### 2-METHYLPENTANE-2,4-DIOL

CAS No.: 107-41-5 EC No.: 203-489-0 REACH No.: 01-2119539582-35-XXXX Concentration: 1 - 5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS07-GHS08; Skin Irrit. 2-Eye Irrit. 2-Repr. 2; H315-H319-H361d

## FLUOROSURFACTANT

Concentration: 1 - 5% The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

#### INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES

Concentration: 10 - 15% The substances are not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP].

#### WATER

CAS No.: 7732-18-5 Concentration: 42,5 - 75,75% The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

The product does not contain any relevant amounts of substances that are on the SVHC list.



For full text of Hazard- and EU Hazard-statements: see SECTION 16.

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

## 4.1 Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately. Wash thoroughly the body (shower or bath). Observe risk of aspiration if vomiting occurs.

When in doubt or if symptoms are observed, get medical advice.

#### Following inhalation

Provide fresh air. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

#### In case of skin contact

Wash immediately with:: Water

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion

Do NOT induce vomiting. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

Dizziness Nausea Gastrointestinal complaints

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

If unconscious but breathing normally, place in recovery position and seek medical advice. IF SWALLOWED: Immediately call a POISON CENTER/doctor/....

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

### 5.2 Special hazards arising from the substance or mixture

The product itself does not burn.

### 5.3 Advice for firefighters

Regardless of the admixture of a foam agent, extinguishing water can be heavily contaminated with hazardous substances due to the absorption of fire residues and should therefore, if possible, not enter the sewage system or bodies of water.

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

## 6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation.

### 6.2 Environmental precautions

Cover drains.





Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal. Suitable material for taking up Sand Sawdust Chemical binding agents, containing acids

### 6.4 Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

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

## 7.1 Precautions for safe handling

Avoid

Skin contact Eye contact Wear personal protection equipment (refer to section 8).

#### Measures to prevent fire

The product is not oxidising Combustible Flammable Explosive Highly flammable No special fire protection measures are necessary.

#### **Environmental precautions**

Shafts and sewers must be protected from entry of the product.

### Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff.

### 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures and storage conditions** Do not store at temperatures above: +50°C

#### Requirements for storage rooms and vessels

Suitable container/equipment material Refined steel Polyethylene (PE) Unsuitable container/equipment material Aluminium Light metal Copper Zinc Alloy, containing copper Alloy, contains light metal



Iron. Steel

## Hints on joint storage

Storage class

12: non-combustible liquids that cannot be assigned to any of the above storage classes

## 7.3 Specific end use(s)

Fire-extinguishing foams based on synthetic surfactants Do not use for cleaning purposes.

### Recommendation

Observe technical data sheet.

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

8.1	Control parameters					
	Substance name: 1,2-ETHANDIOL					
	CAS No.: 107-21-1					
	REACH No.: 01-2119456816-28-XXXX					
	United Kingdom					
	Long-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): TWA (EN)					
	short-term occupational exposure limit value: 40 ppm; Limit value type (country of origin): STEL (EN)					
	European Union					
	Long-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): TWA (EC)					
	short-term occupational exposure limit value: 40 ppm; Limit value type (country of origin): STEL (EC)					
	Germany					
	Long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): AGW (DE)					
	short-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): Peak (DE)					
	Ireland					
	Long-term occupational exposure limit value: 20 ppm; Limit value type (country of origin): TWA (IE)					
	short-term occupational exposure limit value: 40 ppm; Limit value type (country of origin): STEL (IE)					
	Substance name: 2-(2-BUTOXYETHOXY)ETHANOL					
	CAS No.: 112-34-5					
	REACH No.: 01-2119475104-44-XXXX					
	United Kingdom					
	Long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): TWA (EN)					
	short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): STEL (EN)					
	European Union					
	Long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): TWA (EC)					
	short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): STEL (EC)					
	Germany					
	Long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): AGW (DE)					
	short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): Peak (DE)					
	Ireland					
	Long-term occupational exposure limit value: 10 ppm; Limit value type (country of origin): TWA (IE)					
	short-term occupational exposure limit value: 15 ppm; Limit value type (country of origin): STEL (IE)					
8.2	Exposure controls					
	Advices on general occupational hygiene					
	Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.					
	Avoid contact with skin, eyes and clothes.					
	Remove contaminated, saturated clothing.					
	Wash contaminated clothing prior to re-use.					
	Wash ends before breaks and after work.					
	Apply skin care products after work.					



## Eye/face protection

Suitable eye protection Eye glasses with side protection goggles Face protection shield Recommended eye protection articles EN 166

### Hand protection

Suitable gloves type Gloves with long cuffs Suitable material NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber) Breakthrough time 120 min. Thickness of the glove material > 0.6 mm Recommended glove articles EN ISO 374 Breakthrough times and swelling properties of the material must be taken into consideration.

## Body protection

Body protection: not required.

### **Respiratory protection**

Usually no personal respirative protection necessary.

#### Environmental exposure controls

Store concentrate according to national regulations. Do not let the concentrate get into the environment. If possible, hold back the application solution and dispose of after use.

## **SECTION 9: Physical and chemical properties**

a)	Physical state			:	Liquid		
b)	Colour			:	colourless / yellow		
C)	Odour			:	Glycol, Ether, Surfactant		
d)	Melting point/freezir	ng point		:	-15°C	EN 1568:201	8
e)	Boiling point or initi	al boiling point a	and boiling	9			
	range			:	> 100°C	DIN 51751	
f)	Flammability			:	not applicable		
g)	Lower and upper ex	plosion limit/fla	mmability				
	limit			:	No data available		
h)	Flash point			:	No flash point up to 100 °C.		
i)	Ignition temperature	e in °C		:	not applicable		
j)	Decomposition tem	perature		:	No data available		
k)	рН	at °C	20	:	6,5 - 8,5	DIN 19268	
I)	Viscosity	at °C	20	:	< 250(100) mPa*s @ 75(375) 1/s	DIN 53019	structure viscous
		at °C	-15	:	< 500(200) mPa*s @ 75(375) 1/s	DIN 53019	structure viscous
m)	Solubility			:	Water: completely miscible	OECD 105	
n)	Partition coefficient	n-octanol/water	· (loa				



o)	Vapour pressure		:	No data available	
p)	Density and/or relative	_			
	density at °C 20	0	:	1,020 - 1,060 g/ml	DIN 12791
q)	Relative vapour density		:	No data available	
r)	particle characteristics		:	not applicable	
	ther information				
Inf	ormation with regard to physical ha	zarc	d c		
a)	Explosives		:	not applicable	
b)	Explosives		:	not applicable	
C)	Aerosols		:	not applicable	
d)	Oxidising gas		:	not applicable	
e)	Gases under pressure		:	not applicable	
f)	Flammable liquids		:	not applicable	
g)	Flammable solids		:	not applicable	
h)	Self-reactive substances and mixtures		:	not applicable	
i)	Pyrophoric liquids		:	not applicable	
j)	Pyrophoric solids		:	not applicable	
k)	Self-heating substances and mixtures		:	not applicable	
I)	Substances or mixtures which, in contact w	with			
	water, emit flammable gases		:	not applicable	
m)	Oxidising liquids		:	not applicable	
n)	Oxidizing solids		:	not applicable	
o)	Organic peroxides		:	not applicable	
p)	Corrosive to metals		:	See section 7 of the safety data sheet.	
q)	Desensitised explosives		:	not applicable	
Ot	her safety characteristics				
a)	Mechanical sensitivity		:	not applicable	
b)	Self-accelerating polymerisation temperatu	ire			
	(SAPT)		:	not applicable	
C)	formation of explosible dust/air mixtures		:	not applicable	
d)	acid/alkaline reserve		:	not applicable	
e)	Evaporation rate		:	No data available	
f)	miscibility		:	Water: completely miscible	
g)	Conductivity		:	~ 4400 µS/cm	
h)	Corrosiveness		:	Skin corrosion/irritation: none	
				Serious eye damage/irritation: irritant.	
i)	gas group		:	not applicable	
j)	Redox potential		:	not applicable	
,, k)	radical formation potential			not applicable	
I)	photocatalytic properties			not applicable	

Breathing is not possible whilst submerged in the foam. Take care when spraying people!

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

## 10.1 Reactivity

Materials to avoid Alkali (lye), concentrated Alkali metals Acid, concentrated Oxidising agent, strong Reducing agent, strong



Acid halides

10.2	Chemical stability
	No special measures are necessary.
10.3	Possibility of hazardous reactions
	No special measures are necessary.
10.4	Conditions to avoid
	Do not store at temperatures above: +50°C
10.5	Incompatible materials
	See section 7. No additional measures necessary.
10.6	Hazardous decomposition products
	Pyrolysis products, containing fluorine
	Fluorinated hydrocarbons
	Hydrofluoric acid

## **SECTION 11: Toxicological information**

Preparation related information         LD50       > 2000 mg/kg       The acute oral toxicity is corresponding to GHS-category 5.         Species       Rat         Method       Bridging principle "Substantially similar mixtures".         Information on ingredients	Test was carried o	it with a similar mi	ixture.		
Species       Rat         Method       Bridging principle "Substantially similar mixtures".         Information on ingredients       1,2-ETHANDIOL:         LD50 (7d) 2310 mg/kg ==>       Harmful if swallowed.         (Source: ECHA database «Registered substances»)       2-(2-BUTOXY/ETHANOL:         LD50 (14d) 5530 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       OCTYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       DECYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       DECYLSULFATE:         LD50 (14d) 1200 mg/kg ==>       Harmful if swallowed.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       Source: ECHA database «Registered substances»)         2-METHYLPENTANE-2,4-DIOL:       Source:	a) Acute toxicity				
LD50       > 2000 mg/kg       The acute oral toxicity is corresponding to GHS-category 5.         Species       Rat         Method       Bridging principle "Substantially similar mixtures".         Information on ingredients       .         1.2-ETHANDIOL:       LD50 (7d) 2310 mg/kg ==>         Harmful if swallowed.       .         (Source: ECHA database «Registered substances»)       2-(2-BUTOXYETHOXY)ETHANOL:         LD50 (14d) 5530 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       0CTYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       0ECYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       0ECYLSULFATE:         LD50 (14d) 1200 mg/kg ==>       Harmful if swallowed.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.	Acute oral toxicity				
Species       Rat         Method       Bridging principle "Substantially similar mixtures".         Information on ingredients       1,2-ETHANDIOL:         LD50 (7d) 2310 mg/kg ==>       Harmful if swallowed.         (Source: ECHA database «Registered substances»)       2-(2-BUTOXYETHANOL:         LD50 (14d) 5530 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       OCTYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       DECYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       DECYLSULFATE:         LD50 (14d) 1200 mg/kg ==>       Harmful if swallowed.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)       ALKYLPOL YGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>       The acute oral toxicity is corr	•				
Method Bridging principle "Substantially similar mixtures".  Information on ingredients  1,2-ETHANDIOL:  LD50 (7d) 2310 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances»)  2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  DECYLSULFATE: LD50 (14d) > 2000 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances»)  DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances»)  2-METHYLPENTANE-2,4-DIOL:					
Information on ingredients 1,2-ETHANDIOL: LD50 (7d) 2310 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) > 2000 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	Species	Rat			
1,2-ETHANDIOL:         LD50 (7d) 2310 mg/kg ==>         Harmful if swallowed.         (Source: ECHA database «Registered substances»)         2-(2-BUTOXYETHOXY)ETHANOL:         LD50 (14d) 5530 mg/kg ==>         The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)         OCTYLSULFATE:         LD50 (14d) > 2000 mg/kg ==>         The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)         DECYLSULFATE:         LD50 (14d) 1200 mg/kg ==>         The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)         DECYLSULFATE:         LD50 (14d) 1200 mg/kg ==>         Harmful if swallowed.         (Source: ECHA database «Registered substances»)         ALKYLPOLYGLYCOSIDE:         LD50 (14d) > 2000 mg/kg ==>         The acute oral toxicity is corresponding to GHS-category 5.         (Source: ECHA database «Registered substances»)         2.METHYLPENTANE-2,4-DIOL:	Method	Bridging principle "S	Substantially similar mixtures".		
LD50 (7d) 2310 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	Information on ingre	lients			
Harmful if swallowed. (Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	1,2-ETHANDIOL:				
(Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	LD50 (7d)	2310 mg/kg ==>			
2-(2-BUTOXYETHOXY)ETHANOL: LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
LD50 (14d) 5530 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOL YGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOL YGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:		•	gistered substances»)		
The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	•	,			
(Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOL YGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
(Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
DECYLSULFATE: LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
LD50 (14d) 1200 mg/kg ==> Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
Harmful if swallowed. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:					
(Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	· · ·	00			
ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:			gistered substances»)		
The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	· ·		<b>5</b> ··· ··· ··· ,		
The acute oral toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL:	LD50 (14d	> 2000 mg/kg ==>	•		
2-METHYLPENTANE-2,4-DIOL:					
	(Source: E	CHA database «Rec	gistered substances»)		
	2-METHYLPENTAN	E-2,4-DIOL:			
LD0 (15d) > 2000 mg/kg ==>					
The acute oral toxicity is corresponding to GHS-category 5.					
(Source: ECHA database «Registered substances»)		•	gistered substances»)		



No data available The acute oral toxicity is corresponding to GHS-category 5. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: The substances are not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP]. No classification in the above-mentioned hazard class (Source: Safety Data Sheet) Acute dermal toxicity Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: LD50 (14d) > 3500 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: LD50 (1d) 2764 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») DECYLSULFATE: LD50 (14d) > 2000 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: LD50 (14d) > 2000 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL: LD0 (15d) > 2000 mg/kg ==> The acute dermal toxicity is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») FLUOROSURFACTANT: No data available The acute dermal toxicity is corresponding to GHS-category 5. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: The substances are not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP]. No classification in the above-mentioned hazard class (Source: Safety Data Sheet) Acute inhalation toxicity Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: LC50 (6h) > 2,5 mg/L ==> The acute inhalation toxicity related to vapours is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») 2-(2-BUTOXYETHOXY)ETHANOL: NOEC (2h) 29 ppm ==> The acute inhalation toxicity related to vapours is corresponding to GHS-category 5. (Source: ECHA database «Registered substances») OCTYLSULFATE: No data available



No information available. No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
DECYLSULFATE:	
No data available	
No information available. No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
ALKYLPOLYGLYCOSIDE:	
No data available	
No information available. No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
2-METHYLPENTANE-2,4-DIOL:	
No data available	
No information available. No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
FLUOROSURFACTANT:	
No data available	
No information available. No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:	
The substances are not classified as dangerous according to Regulation (EC) No. 1272/2	J08 [CLP].
No classification in the above-mentioned hazard class	
(Source: Safety Data Sheet)	
b) Skin corrosion/irritation	
Preparation related information	
non-irritant	
Species	
Method Bridging principle "Substantially similar mixtures".	
Information on ingredients	
1,2-ETHANDIOL:	
non-irritant.	
(Source: Safety Data Sheet)	
2-(2-BUTOXYETHOXY)ETHANOL: non-irritant.	
(Source: Safety Data Sheet) OCTYLSULFATE:	
Causes skin irritation.	
(Source: Safety Data Sheet)	
DECYLSULFATE: Causes skin irritation.	
(Source: Safety Data Sheet)	
ALKYLPOLYGLYCOSIDE:	
non-irritant.	
(Source: Safety Data Sheet)	
2-METHYLPENTANE-2,4-DIOL:	
Causes skin irritation.	
(Source: Safety Data Sheet)	
FLUOROSURFACTANT:	
non-irritant.	
(Source: Safety Data Sheet)	
INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:	
non-irritant.	
(Source: Safety Data Sheet)	
a) Sariaus ava damaga/irritation	
c) Serious eye damage/irritation Preparation related information	
Causes eye irritation.	

Bridging principle "Substantially similar mixtures".

Species

Method



## Information on ingredients 1,2-ETHANDIOL: non-irritant. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: Causes serious eye irritation. (Source: Safety Data Sheet) OCTYLSULFATE: Causes serious eye damage. (Source: Safety Data Sheet) DECYLSULFATE: Causes serious eye damage. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: Causes serious eye damage. (Source: Safety Data Sheet) 2-METHYLPENTANE-2.4-DIOL: Causes serious eye irritation. (Source: Safety Data Sheet) FLUOROSURFACTANT: non-irritant. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: non-irritant. (Source: Safety Data Sheet) d) Respiratory or skin sensitisation Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: not sensitising. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: not sensitising. (Source: Safety Data Sheet) OCTYLSULFATE: not sensitising. (Source: Safety Data Sheet) DECYLSULFATE: not sensitising. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: not sensitising. (Source: Safety Data Sheet) 2-METHYLPENTANE-2.4-DIOL: not sensitisina. (Source: Safety Data Sheet) FLUOROSURFACTANT: not sensitising. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: not sensitising. (Source: Safety Data Sheet) e) Germ cell mutagenicity

<u>Preparation related information</u> There are no data available on the mixture itself. Information on ingredients



1,2-ETHANDIOL:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
2-(2-BUTOXYETHOXY)ETHANOL:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
OCTYLSULFATE:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
DECYLSULFATE:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
ALKYLPOLYGLYCOSIDE:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
2-METHYLPENTANE-2,4-DIOL:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
FLUOROSURFACTANT: No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
No indications of human germ cell mutagenicity exist.
(Source: Safety Data Sheet)
f) Carcinogenicity
Preparation related information
There are no data available on the mixture itself.
Information on ingredients
1,2-ETHANDIOL:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
2-(2-BUTOXYETHOXY)ETHANOL:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
OCTYLSULFATE:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
DECYLSULFATE:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
ALKYLPOLYGLYCOSIDE:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
2-METHYLPENTANE-2,4-DIOL:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
FLUOROSURFACTANT:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
No indication of human carcinogenicity.
(Source: Safety Data Sheet)
a) Depreductive toxicity
g) Reproductive toxicity
Preparation related information
There are no data available on the mixture itself.

Information on ingredients 1,2-ETHANDIOL:



No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) OCTYLSULFATE: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) DECYLSULFATE: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: Suspected of damaging the unborn child. (Source: Safety Data Sheet) FLUOROSURFACTANT: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: No indications of human reproductive toxicity exist. (Source: Safety Data Sheet) h) STOT-single exposure Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: No known symptoms to date. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: No known symptoms to date. (Source: Safety Data Sheet) OCTYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) DECYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: No known symptoms to date. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: No known symptoms to date. (Source: Safety Data Sheet) FLUOROSURFACTANT: No known symptoms to date. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: No known symptoms to date. (Source: Safety Data Sheet) i) STOT-repeated exposure

Preparation related information
There are no data available on the mixture itself.
Information on ingredients
1,2-ETHANDIOL:
May cause damage to kidneys through prolonged or repeated exposure if swallowed.





(Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: No known symptoms to date. (Source: Safety Data Sheet) OCTYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) DECYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: No known symptoms to date. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: No known symptoms to date. (Source: Safety Data Sheet) FLUOROSURFACTANT: No known symptoms to date. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: No known symptoms to date. (Source: Safety Data Sheet) j) Aspiration hazard Preparation related information There are no data available on the mixture itself. Information on ingredients 1.2-ETHANDIOL: No known symptoms to date. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: No known symptoms to date. (Source: Safety Data Sheet) OCTYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) DECYLSULFATE: No known symptoms to date. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: No known symptoms to date. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: No known symptoms to date. (Source: Safety Data Sheet) FLUOROSURFACTANT: No known symptoms to date. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: No known symptoms to date. (Source: Safety Data Sheet)

## **11.2 Information on other hazards**

Endocrine disrupting properties
Preparation related information
There are no data available on the mixture itself.
Information on ingredients
1,2-ETHANDIOL:
This substance does not have endocrine disrupting properties with respect to humans.



(Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) OCTYLSULFATE: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: This substance does not have endocrine disrupting properties with respect to humans. (Source: Safety Data Sheet)

## Other information

Breathing is not possible whilst submerged in the foam. Take care when spraying people!

## **SECTION 12: Ecological information**

### 12.1 Toxicity

Acute (short-term) fish toxicity	
Preparation related information	
Effective dose LC50	: > 100 < 1000* mg/L
Exposure time	: 96 h
Species	: Leuciscus idus (golden orfe)
Method	: Bridging principle "Substantially similar mixtures".
Information on ingredients	
1,2-ETHANDIOL:	
LC50 (96h) > 72860 mg/	L
(Source: ECHA database	e «Registered substances»)
2-(2-BUTOXYETHOXY)ETHANO	L:
LC50 (96hr) 1300mg/L	
1	e «Registered substances»)
OCTYLSULFATE:	
LC50 (96h) > 100 mg/L;	
	e «Registered substances»)
DECYLSULFATE:	
LC50 (48h) 13 mg/L	
1	e «Registered substances»)
ALKYLPOLYGLYCOSIDE:	
LC50 (96h) 100,81 mg/L	
(	e «Registered substances»)
2-METHYLPENTANE-2,4-DIOL:	*
LC50 (96h) > 8510 mg/L	
(Source: Safety Data Sho FLUOROSURFACTANT:	eet)
No data available	
	aat
(Source: Safety Data Sh	D AS HAZARDOUS SUBSTANCES <sup>.</sup>
INGREDIENTS NOT CLASSIFIED	JASTALANDUUS SUDSTANCES.



No classification in the above-mentioned hazard class (Source: Safety Data Sheet)

## Acute (short-term) toxicity to aquatic invertebrates

Acute (short-term) toxicity to a	aquatic invertebrates
Preparation related information	
Effective dose EC50	-
Exposure time	: 48 h
Species	: Daphnia magna (Big water flea)
Method	: Bridging principle "Substantially similar mixtures".
Information on ingredients	
1,2-ETHANDIOL:	
EC50 (48h) > 13900 m	
	se «Registered substances»)
2-(2-BUTOXYETHOXY)ETHAN	
EC50 (48hr) > 1101 mg	
(Source: ECHA databa	se «Registered substances»)
	.; NOEC (48 h) 100 mg/L
, , <b>.</b>	se «Registered substances»)
DECYLSULFATE:	se «Registered substances»)
EC50 (48h) > 100 mg/L	
	- se «Registered substances»)
ALKYLPOLYGLYCOSIDE:	· · · · · · · · · · · · · · · · · · ·
EC50 (48h) > 100 mg/l	_
	se «Registered substances»)
2-METHYLPENTANE-2,4-DIOL	:
LC50 (48h) 2800 mg/L	
(Source: ECHA databa	se «Registered substances»)
FLUOROSURFACTANT:	
No data available	
(Source: Safety Data S	
	ED AS HAZARDOUS SUBSTANCES:
	above-mentioned hazard class
(Source: Safety Data S	neet)
Acute (short-term) toxicity to a	algae and cyanobacteria
Preparation related information	
Effective dose EC50	: > 10 < 100* mg/L
Exposure time	: 72 h
Species	: Scenedesmus subspicatus
Method	: Bridging principle "Substantially similar mixtures".
Information on ingredients	
1,2-ETHANDIOL:	
	/L; NOEC (96h) 479 mg/L
0011/ 0000 mg	-,

2-(2-BUTOXYETHOXY)ETHANOL: EC50 (72h) 1 101 mg/L (Source: ECHA database «Registered substances») OCTYLSULFATE: EC50 (72h) > 511 mg/L; NOEC (72h) 199 mg/L (Source: ECHA database «Registered substances») DECYLSULFATE: EC50 (72h) 8,64 mg/L; NOEC (72h) 0,95 mg/L (Source: ECHA database «Registered substances») ALKYLPOLYGLYCOSIDE: EC50 (72h) 27,22 mg/L; NOEC (72h) 6,25 mg/L (Source: ECHA database «Registered substances») 2-METHYLPENTANE-2,4-DIOL: NOEC (72h) 429 mg/L

(Source: ECHA database «Registered substances»)



		CHA database «Registered substances»)	
	FLUOROSURFACT		
	No data av		
		afety Data Sheet)	
		T CLASSIFIED AS HAZARDOUS SUBSTANCES:	
		cation in the above-mentioned hazard class	
	(Source: S	afety Data Sheet)	
	Effects in sewage	njante	
		-	
	Preparation related		
		: Respiratory inhibition of municipal activated sludge.	
	1000* mg/L		
	100000* mg/L	► Concentration : 1% Dilution :> 10*	
	Method	: Bridging principle "Substantially similar mixtures".	
	Information on ingre	acients	
	1,2-ETHANDIOL:		
		5h) > 1995 mg/L iCHA database «Registered substances»)	
	2-(2-BUTOXYETHC		
		5h) 1995 mg/L	
		iCHA database «Registered substances»)	
	OCTYLSULFATE:		
	EC50 (3h)	135 ma/L	
	( )	CHA database «Registered substances»)	
	DECYLSULFATE:		
	EC50 (3h)	135 mg/L	
	(Source: E	CHA database «Registered substances»)	
	ALKYLPOLYGLYC		
		> 560 mg/L	
	•	CHA database «Registered substances»)	
	2-METHYLPENTAN		
	No data av		
	(Source: S		
	FLUOROSURFACT No data av		
		afety Data Sheet) T CLASSIFIED AS HAZARDOUS SUBSTANCES:	
		cation in the above-mentioned hazard class	
		afety Data Sheet)	
	(000100.0		
	The product contain	is fluorosurfactants that are not completely biodegradable.	
		nents are poorly biodegradable.	
	·		
	Remark		
	Observe local regula	ations concerning effluent treatment.	
	Special pre-treatment	-	
	* The statement is d	lerived from products of similar structure or composition.	
12.2	Persistence a	and degradability	
	Biodegradation		
	Preparation related		
	Readily biodegradal	ble (according to OECD criteria).	
	Additional information	on : The product contains fluorosurfactants that are not completely biodegradable.	
	Degradation rate	: >70%*	
	Test duration	: 28 d	
	Analytical method	: BOD (% of COD).	
	Method	: Bridging principle "Substantially similar mixtures".	
wining de	to: 20 06 2022	Version: V/00	Doplogoo: 16 05 2022



	Туре	: Aerobic biolo	ogical treatm	ent				
	Information on ingredients							
	1,2-ETHANDIOL:							
	> 90% (10d) OECD 301A							
	Readily biodegradable (according to OECD criteria).							
	(Source: ECHA database «Registered substances»)							
	2-(2-BUTOXYETHOXY)ETHANOL: 92% (28d) OECD 301 E							
	92% (28d) OECD 301 E Readily biodegradable (according to OECD criteria).							
	(Source: ECHA database «Registered substances»)							
	OCTYLSULFATE:							
		OECD 301 B						
	•	egradable (according to (		,				
		HA database «Registered	d substances	S»)				
	DECYLSULFATE:							
	92% (30d) OECD 301 D Readily biodegradable (according to OECD criteria).							
		HA database «Registered						
	ALKYLPOLYGLYCOS			,				
	70% (28d) O	ECD 301 A						
	•	egradable (according to 0		,				
		HA database «Registered	d substances	s»)				
	2-METHYLPENTANE							
	> 60% (20d) Readily biod	OECD 301 F egradable (according to (	NECD oritori	2)				
	•	HA database «Registered		,				
	FLUOROSURFACTA			, "(				
	No data avail							
	No classificat	tion in the above-mentior	ned hazard c	lass				
		ety Data Sheet)						
		CLASSIFIED AS HAZAR	RDOUS SUB	STANCES:				
	> 70% (28d) OECD 301							
	•	Readily biodegradable (according to OECD criteria). (Source: Safety Data Sheet)						
		ely Dala Sheel)						
	Chemical ovxgen de	Chemical oyxgen demand (COD)						
	< 1000000* mg *O2/l		: 100%	Method	DIN EN 38409-H4	1-1		
	-	L Concentration	: 1%	Method	DIN EN 38409-H4	1-1		
	0	-						
	Biochemical oxygen	demand						
	< 600000* mg *O2/l	L <ul> <li>Concentration</li> </ul>	: 100%	Method	DIN EN 1899-1	Test duration	5 d	
	< 6000* mg *O2/	L <ul> <li>Concentration</li> </ul>	: 1%	Method	DIN EN 1899-1	Test duration	5 d	
	BOD5/COD ratio							
	60%							
	* The statement is der	ived from products of sim	nilar structure	e or composition.				
12.3	Bioaccumulati							
	Preparation related inf	r <u>ormation</u> hilable on the mixture itsel	L.					
	Information on ingredie		II.					
	1,2-ETHANDIOL: log Kow -1,36							
		o of bioaccumulation pote	ntial.					
	(Source: ECHA database «Registered substances»)							
	2-(2-BUTOXYETHOXY)ETHANOL:							
	log Kow < 3							



	No indication of bioaccumulation potential.
	(Source: ECHA database «Registered substances»)
	OCTYLSULFATE:
	log Pow < -2.31
	No indication of bioaccumulation potential.
	(Source: ECHA database «Registered substances»)
	DECYLSULFATE:
	log Pow 1.72
	No indication of bioaccumulation potential.
	(Source: ECHA database «Registered substances»)
	ALKYLPOLYGLYCOSIDE:
	log Kow < 1,77
	No indication of bioaccumulation potential.
	(Source: ECHA database «Registered substances»)
	2-METHYLPENTANE-2,4-DIOL:
	log Kow < 3
	•
	No indication of bioaccumulation potential.
	(Source: ECHA database «Registered substances»)
	FLUOROSURFACTANT:
	No data available
	No information available. No classification in the above-mentioned hazard class
	(Source: Safety Data Sheet)
	INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
	No classification in the above-mentioned hazard class
	No information available. No classification in the above-mentioned hazard class
	(Source: Safety Data Sheet)
12.4	Mobility in soil
	If product enters soil, it will be mobile and may contaminate groundwater.
12 5	Results of PRT and vPvR assessment
12.5	
12.5	Preparation related information
12.5	Preparation related information There are no data available on the mixture itself.
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients
12.5	Preparation related information There are no data available on the mixture itself.
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         Classifier of the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         0CTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-METHYLPENTANE-2.4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-METHYLPENTANE-2.4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         ALKYLPOLYGLYCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         ALKYLPOLYGLYCOS/DE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         2-METHYLPENTANE-2,4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.         (Source: Safety Data Sheet)         FLUOROSURFACTANT:
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) 2-(2-BUTOXYETHOXY)ETHANOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) OCTYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) 2.METHYLPPLYANK-2.4-DIOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         ALKYLPOLYGL YCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-METHYLPENTANE-2.4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         FLUOROSURFACTANT:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         FLUOROSURFACTANT:         This substance does not meet the PBT/vPvB criteria of REACH, Annex
12.5	Preparation related information There are no data available on the mixture itself. Information on ingredients 1,2-ETHANDIOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) 2/(2-BUTOXYETHOXY)ETHANOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) OCTYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) DECYLSULFATE: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) 2-METHYLPENTANE-2,4-DIOL: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) FLUOROSURFACTANT: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
12.5	Preparation related information         There are no data available on the mixture itself.         Information on ingredients         1,2-ETHANDIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-(2-BUTOXYETHOXY)ETHANOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         OCTYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         DECYLSULFATE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         ALKYLPOLYGL YCOSIDE:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         2-METHYLPENTANE-2.4-DIOL:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         FLUOROSURFACTANT:         This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII. (Source: Safety Data Sheet)         FLUOROSURFACTANT:         This substance does not meet the PBT/vPvB criteria of REACH, Annex



12.6	Endocrine disrupting properties
	Preparation related information
	There are no data available on the mixture itself.
	Information on ingredients
	1,2-ETHANDIOL:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	2-(2-BUTOXYETHOXY)ETHANOL:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	OCTYLSULFATE:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	DECYLSULFATE:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	ALKYLPOLYGLYCOSIDE:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	2-METHYLPENTANE-2,4-DIOL:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	FLUOROSURFACTANT:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
	INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
	This substance does not have endocrine disrupting properties with respect to humans.
	(Source: Safety Data Sheet)
12.7	Other adverse effects
	The product contains fluorosurfactants that are not completely biodegradable.

## **SECTION 13: Disposal considerations**

### **13.1 Waste treatment methods**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

## Waste codes/waste designations according to EWC/AVV

Waste code product

- 16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST
- 1603 off-specification batches and unused products
- 160305\* organic wastes containing dangerous substances

#### Waste code packaging

15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT
15	OTHERWISE SPECIFIED

- 1501 packaging (including separately collected municipal packaging waste)
- 150110\* packaging containing residues of or contaminated by dangerous substances

### Remark

Delivery to an approved waste disposal company. Send to a hazardous waste incinerator facility under observation of official regulations.

## **SECTION 14: Transport information**

## 14.1 UN number or ID number



	none					
14.2	UN proper shipping name					
	not applicable					
14.3	Transport hazard class(es)					
	Land transport (ADR/RID)					
	No dangerous good in sense of these transport regulations.					
	Inland waterway craft (ADN)					
	No dangerous good in sense of these transport regulations.					
	Sea transport (IMDG)					
	No dangerous good in sense of these transport regulations.					
	Air transport (ICAO-TI / IATA-DGR)					
	No dangerous good in sense of these transport regulations.					
14.4	Packing group					
	not applicable					
14.5	Environmental hazards					
	none					
	Marine pollutant : No					
14.6	Special precautions for user					
	none					
14.7	Maritime transport in bulk according to IMO instruments					
	not applicable					
SEC	ΓION 15: Regulatory information					
15.1						
	EU legislation					
	Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer not applicable					
	Regulation (EU) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals not applicable					

Directive 96/59/EC (PCB-guideline) not applicable

Regulation (EC) No. 648/2004 [Detergents regulation] The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents.

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline). Volatile organic compounds (VOC) content in percent by weight:: max. 10

Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases not applicable

## Regulation (EC) No 2019/1021 [POP/PFOS-Regulation]

The product fulfills all requirements and limit values of this EU regulation. The validity of this statement refers to the assessment period from January 1st, 2021. Separate information must be obtained from the manufacturer for the time before that.



#### Regulation (EC) No 2020/784 [PFOA-Regulation]

The product fulfills all requirements and limit values of this EU regulation. The validity of this statement refers to the assessment period from January 1st, 2021. Separate information must be obtained from the manufacturer for the time before that.

### Regulation (EC) No 2021/1297 [C9-C14-PFCA-Regulation]

The product fulfills all requirements and limit values of this EU regulation. The validity of this statement refers to the assessment period from January 1st, 2021. Separate information must be obtained from the manufacturer for the time before that.

### National regulations

**Störfallverordnung (12. BlmschV)** This product is not classified according to StörfallV.

#### Water hazard class

slightly hazardous to water (WGK 1) Self-classification according to AwSV (mixture).

#### Annex Chemikalien-Verbotsverordnung (ChemVerbotsV) not applicable

### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

The product described in the Safety Data Sheet may only be used for its intended purpose. For exercises please observe the recommendations of the technical committee of BMU/LAMA. The details in this safety data sheet are based on today's stand of our knowledge and is applicable to the product with regard to appropriate safety precautions. They do not represent any guarantee of the properties of the product and do not establish any legal relationship.

Please refer to our internet website for more information. www.sthamer.com

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

#### Classification for the 1%/3% application solution of MOUSSOL-APS 1/3 F-15 #3472:

The information in this safety data sheet only applies to the unchanged product in the delivery condition. An application solution prepared therefrom by diluting it with water as recommended usually has significantly fewer hazardous features due to the dilution principle and can even be unclassified. See also the environmental data sheet provided by us.

#### Full text of Hazard- and EU Hazard-statements

- H302 Harmful if swallowed or if inhaled.
- H315 Causes skin and eye irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H361d Suspected of damaging the unborn child.
- H373.8 May cause damage to kidneys through prolonged or repeated exposure if swallowed.
- H412 Harmful to aquatic life with long lasting effects.

Main Office Hamburg	Sales Office Hannover	Sales Office Jena	Office Frankenthal		GUV Ten QM
Liebigstr. 5	Hartenbrakenstr. 54	Carl-Pulfrich-Str. 1	Siemensstr. 4	info@sthamer.com	
22113 Hamburg	30659 Hannover	07745 Jena	67227 Frankenthal		
GERMANY	GERMANY	GERMANY	GERMANY	www.sthamer.com	zertifiziert
Tel.: +49 (0)40 73 61 68-0	Tel.: +49 (0)511 768 358-45	Tel.: +49 (0)3641 63538-57	Tel.: +49 (0)6233 3796-605		SEE
Fax: +49 (0)40 73 61 68-60	Fax: +49 (0)511 768 358-46	Fax: +49 (0)3641 63538-59	Fax: +49 (0)6233 3796-622		

Replaces: 16.05.2023 (V08)