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SEC	TION 1: Identification of the	substance/mixture and of the company/undertaking
1.1	Product identifier	
	MOUSSOL [®] -APS LV	1/1 F-25 #6141
	UFI: Q80J-C0EV-600Q-1X2A	
1.2	Relevant identified uses of the	substance or mixture and uses advised against
	Use of the substance/mixture	
	Fire-extinguishing foam	
1.3	Details of the supplier of the sa	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
	Telephone	+49 (0)551/19240

SECTION 2: Hazards identification

The information in this section and in all following sections (unless otherwise stated) refer to the product in the delivery condition (concentrate). The ready-to-use solutions prepared according to the dilution recommendation are to be classified differently (see Section 16).

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 [CLP] Eye Irrit. 2 H319 - STOT RE 2 H373 Label elements 2.2 Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms Signal word WARNING Hazard statements H319 Causes serious eye irritation. H373.8 May cause damage to kidneys through prolonged or repeated exposure if swallowed. H412 Harmful to aquatic life with long lasting effects. Precautionary statements P262 Do not get in eyes, on skin, or on clothing. P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/.... P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin P303+P361+P353 with water [or shower]. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Version V15: 25.05.2018 Revision date: 19.10.2021 SD - 6141 - V16 - MOUSSOL-APS LV 1x1 F-25 #6141 - EN



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		lenses, if present and easy to do. Continue rinsing.
	Classification procedure	On basis of test data./Experimental data
2.3	Other hazards	
	Endocrine disrupting properti	es
	Preparation related information	
	There are no data available on t	ne mixture itseit.
	Information on ingredients 1,2-ETHANDIOL:	
	2-(2-BUTOXYETHOXY)ETHAN	
	This substance does n OCTYLSULFATE:	ot have endocrine disrupting properties with respect to humans.
	This substance does n DECYLSULFATE:	ot have endocrine disrupting properties with respect to humans.
	This substance does n ALKYLPOLYGLYCOSIDE:	ot have endocrine disrupting properties with respect to humans.
		ot have endocrine disrupting properties with respect to humans.
	This substance does n	ot have endocrine disrupting properties with respect to humans.
		ED AS HAZARDOUS SUBSTANCES: ot have endocrine disrupting properties with respect to humans.
		or have endocrine disrupting properties with respect to numaris.
	Results of PBT and vPvB ass	essment
	Preparation related information There are no data available on t	ho miviture itaalf
	Information on ingredients	
	1,2-ETHANDIOL:	
	•	ot meet the PBT/vPvB criteria of REACH, Annex XIII.
	2-(2-BUTOXYETHOXY)ETHAN	
	. ,	ot meet the PBT/vPvB criteria of REACH, Annex XIII.
		ot meet the PBT/vPvB criteria of REACH, Annex XIII.
	DECYLSULFATE:	
		ot meet the PBT/vPvB criteria of REACH, Annex XIII.
	ALKYLPOLYGLYCOSIDE:	
	This substance does n FLUOROSURFACTANT:	ot meet the PBT/vPvB criteria of REACH, Annex XIII.
		ot meet the PBT/vPvB criteria of REACH, Annex XIII.
		ED AS HAZARDOUS SUBSTANCES:
		mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.
	The data refer to the product as differently.	delivered. The solutions for use produced according to dilution recommendations are to be classified
	Can harm the aquatic fauna whe	en entering surface waters.
	•	n in waste water treatment plants when entering the sewerage system.
		submerged in the foam. Take care when spraying people!
		actants that are not completely biodegradable.
		ns always pose a danger to aquatic life because they greatly reduce the surface tension of water thus
		ociated with it. In sewage treatment plants, for example, the necessary aeration of the sewage stages can be
	hindered by the strong foam for	nation.

SECTION 3: Composition / information on ingredients

3.1 Substances





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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: 15 - 20% 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: 1 - 5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS05; Acute Tox. 4-Skin Irrit. 2-Eye Dam. 1; H302-H315-H318

ALKYLPOLYGLYCOSIDE

CAS No.: 68515-73-1 EC No.: 500-220-1 REACH No.: 01-2119488530-36-XXXX Concentration: 5 - 10% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS05; Eye Dam. 1; H318

FLUOROSURFACTANT

CAS No.: 34455-29-3 EC No.: 252-046-8 REACH No.: 01-2120119140-76-XXXX Concentration: 1 - 5% Classification according to Regulation (EC) No 1272/2008 [CLP]: GHS07-GHS09; Eye Irrit. 2-Aquatic Chronic 2; H319-H411

INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES

Concentration: 15 - 20% The substances are not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP].

WATER

CAS No.: 7732-18-5 Concentration: 25 - 57% 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.

Full text of H- and EUH-statements: see section 16.





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.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/

SEC	TION 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





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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

Refined steel Polyethylene (PE) Unsuitable container/equipment material Aluminium Light metal Copper



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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



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	preventive measures while handling with working materials are specified in the TRGS 500.
Avoid contact with skir	•
Remove contaminated	•
Wash contaminated cl	•
Wash hands before br	
Apply skin care produc	ts after work.
Eye/face protection	
Suitable eye protection	1
Eye glasses wit	th side protection
goggles	
Face protection	
Recommended eye pr	otection articles
DIN EN 166	
Hand protection	
Suitable gloves type	
Gloves with long	g cuffs
Suitable material	
NBR (Nitrile rub	iber)
Butyl caoutchou	uc (butyl rubber)
Breakthrough time	
120 min.	
Thickness of the glove	material
> 0.6 mm	
Recommended glove	articles
EN ISO 374	
Breakthrough times ar	nd swelling properties of the material must be taken into consideration.
Body protection	
Body protection: not re	quired.
Respiratory protection)n
Usually no personal re	spirative protection necessary.
Environmental expos	sure controls
-	ording to national regulations.
	rate get into the environment.
	he application solution and dispose of after use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties a) Physical state Liquid : b) Colour yellow / brown : c) Odour Glycol, Ether, Surfactant : Melting point/freezing point d) -25°C EN 1568:2018 : Melting point/freezing point : >100°C DIN 51751 e) Flammability f) : not applicable Lower and upper explosion limit/flammability g) limit : No data available h) Flash point No flash point up to 100 °C. :



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i) Ignition temperature :: Not data available i) Decomposition temperature :: Not data available ii) Viscosity at °C 20 :: : Not data available ii) Viscosity at °C 20 :: : Not data available iii) Particibic coefficient n-octanoldwater (log value) :: IV data: completely miscible OECD 105 iii) Particibic coefficient n-octanoldwater (log value) :: not applicable OECD 105 ivalue) :: not applicable OECD 105 IV data: available IV available i) Dentify and/or relate :: Ivalue available IV available IV available i) Dentify and/or relate :: Ivalue available IV available IV available i) Rapicable :: Not data available IV available IV available i) Rapicable :: Not data available IV available IV available i) Rapicable :: Not daplicable IV available IV available i)								
j) Decomposition temperature : No data available k) pH at *C 20 : 55.*8,5 DIN 19258 Newton at *C 20 : : SUM 19552 Newton m Solubility : Value: DIN 19552 Newton n) Partition coefficient n-octanol/water (tog : Value: in ordipricible OECD 105 value: : not applicable : No data available P Density and/or relative in particle characteristics : not applicable DIN 12731 IN 12731 information with regard to physical hazard classes : not applicable Din 12731 IN 12731 information with regard to physical hazard classes : not applicable Displicable Displicable i Datability : No data available Din 12731 IN 12731 i Relative vapour density : not applicable Displicable Displicable i Datability : not applicable Displicable Displicable Displicable <th></th> <th>i)</th> <th>Ignition temperature in °C</th> <th></th> <th>:</th> <th>not applicable</th> <th></th> <th>I</th>		i)	Ignition temperature in °C		:	not applicable		I
iv pH at*C 20 : <sd mm*is<="" td=""> DIN 19288 iv Viscosity at*C 22 : <sd mm*is<="" td=""> DIN 19282 Newton m) Solubility : : Water: completely miscible OECD 105 iv at*C 22 : nt applicable OECD 105 value) : in d applicable OECD 105 Iv value) : in d applicable OECD 105 value) : in d applicable OECD 105 value) : in d applicable OEVER 100 in deplicable : No data available DIN 12731 in Relative vapour density : No data available DIN 12731 in Relative vapour density : not applicable DIN 12731 in Relative vapour density : not applicable DIN 12731 in Relative vapour density : not applicable DIN 12731 in dapplicable : not applicable Din 12731 in dapplicable : : not applicable</sd></sd>					:			
I) Viscosity at *C 20 : < < < < < < < < < < < < < < < < < < <				20	:	6.5 - 8.5	DIN 19268	
at °C -25 : < <00 nm²/s DIN 51562 Newton m) Solubility :: Water.completely miscible OECD 105 value) : not applicable . OECD 105 ivalue) : not applicable . . ivalue : : not applicable . . ivalue : : : ivalue : : : : <			•					Newton
m) Solubility Wate: completely missible OECD 105 n) Partition coefficient n-octanol/water (log value) : not applicable o) Vapour pressure : No data available p) Density and/or relative density at °C 20 : 1.000 - 1.130 g/ml q) Relative vapour density : No data available Diversitie g) Relative rapour density : No data available g) Relative rapour density : Not applicable g) Explosives : not applicable g) Relative rapour density : not applicable g) Flammable liquids : not applicable g) Flammable solids : not applicable g) Self-reactive subatances and mixtures		'	•			< 900 mm²/s		
n) Partition coefficient n-octanol/water (log value) : not applicable) Vapour pressure : No data available) Density and or relative density at °C 20 : 1.090-1.130 g/ml DIN 12791 () Relative vapour density : No data available) particle characteristics : not applicable) Factor information Information with regard to physical hazard classes a) Explosives : not applicable () Arcsots : not applicable) Explosives : not applicable () Oxidising gas : not applicable () Pyrophoric liquids : not applicable () Pyrophoric solids : not applicable () Pyrophoric solids : not applicable () Subtances on mixtures : not applicable () Subtances and mixtures : not applicable () Subtances on diverses : not applicable () Subtances on diverses : not applicable () Subtances on diverses : not applicable () Oxidising liquids : not applicable () Self-excelerating polymerisation temperature (SAPT) : not applicable () Dentovativity : -1000 US trm () C		m)						
value) : not applicable o) Vapour pressure : No data available p) Density and/or relative density at "C 20 : 1,030 - 1,130 g/ml DIN 12791 q) Relative vapour density : No data available . . . 9) particle characteristics : not applicable . . . 92 Other information Information with regard to physical hazard classes a) Explosives : not applicable . c) Acrosols : not applicable . q) Gotiding gas : not applicable . q) Gotiding gas : not applicable . q) Gotiding gas : not applicable . q) Grammable solids : not applicable . q) Flammable solids : not applicable . q) Pyrophoric liquids : not applicable . q) Pyrophoric solids : not applicable . q) Pyrophoric solids : not applicable . q) Pyrophoric solids : not applicable . q) Option solids : not applicable . q) Descrosive to			-	r (loa	·		0200 100	
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b) Explosives : not applicable c) Aerosols : not applicable d) Oxidising gas : not applicable e) Gases under pressure : not applicable g) Flammable liquids : not applicable g) Flammable solids : not applicable h) Self-reactive substances and mixtures : not applicable j) Pyrophoric liquids : not applicable k) Self-heating substances and mixtures : not applicable h) Self-theating substances and mixtures : not applicable h) Self-stactive substances and mixtures : not applicable h) Substances or mixtures which, in contact with water, emit flammable gases : not applicable m) Oxidising liquids : not applicable p) Corrosive to metals : not applicable p) Corrosive to metals : See section 7 of the safety data sheet. q) Desensitised explosives : not applicable D'sensitised explosives : not applicable c) Organic peroxides : not applicable d) Self-accelerating polymerisation temperature (SAPT) : not applicable d) acid/alkaline reserve : not applicable f) Self-accelerating polymerisation temperature (SAPT) : not applicable f) miscibile dust/ar mixtures : not applicable f) Corrosiveness : Skin corrosion/inflation: none Serious eye damage/inflation: inflat h) Corrosiveness : Skin corrosion/inflation: inflat h) Corrosiveness : Skin corrosion/inflation: inflat h) Redox potential : not applicable k) radical formation potential : not app								
 Aerosols : not applicable Oxidising gas : not applicable Gases under pressure : not applicable Gases under pressure : not applicable Flammable iguids : not applicable Flammable solids : not applicable Pyrophoric liquids : not applicable Pyrophoric solids : not applicable Pyrophoric solids : not applicable Substances and mixtures : not applicable Substances or mixtures which, in contact with water, enit fammable gases : not applicable Substances or mixtures which, in contact with water, enit fammable gases : not applicable Oxidising liquids : not applicable Oxidising solids : not applicable Oxidising solids : not applicable Oxidising solids : not applicable Other safety characteristics Mechanical sensitivity : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Desensitised explosives : not applicable See section 7 of the safety data sheet. Cother safety characteristics Mechanical sensitivity : not applicable See section 7 of the safety data sheet. See section 7 of the safety data sheet. Cother safety characteristics No data available miscibility : velocible dustair mixtures : not applicable Secose eye damagel/rifitation: none Serious eye damagel/rifitation: infant gas group : not applicable Redox potential : not applicable not applicable<th></th><th>,</th><th>-</th><th></th><th>:</th><th></th><th></th><th></th>		,	-		:			
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 j) Pyrophoric liquids : not applicable j) Pyrophoric solids : not applicable j) Pyrophoric solids : not applicable i) Substances and mixtures : not applicable i) Substances and mixtures : not applicable i) Substances or mixtures which, in contact with ware, emit flammable gases m) Oxidising liquids : not applicable n) Oxidising liquids : not applicable o) Organic peroxides : not applicable p) Corrosive to metals : Seeccin 7 of the safety data sheet. q) Desensitised explosives : not applicable b) Self-accelerating polymerisation temperature : not applicable (SAPT) : not applicable : applicable q) Desensitised explosible dust/air mixt		,			:			
 Gases under pressure : not applicable Flammable liquids : not applicable Flammable solids : not applicable Self-reactive substances and mixtures : not applicable Pyrophoric liquids : not applicable Pyrophoric solids : not applicable Substances or mixtures which, in contact with water, emit flammable gases : not applicable Oxidizing solids : not applicable Oxidizing solids : not applicable Organic peroxides : not applicable Corrosive to metals : See section 7 of the safety data sheet. Desensitised explosives : not applicable Self-acating polymerisation temperature (SAPT) : not applicable Self-acating polymerisation temperature : not applicable Corrosive to metals : not applicable Self-acating polymerisation temperature : No data available miscibility : value : not applicable Conductivity : - 1800 µS/cm Corrosiveness : Skin corrosion/inflation: none Serious eye damage/inflation: inflatint g as group : not applicable Nedox potential : not applicable photocatalytic properties : not applicable photocatalytic properties : not applicable photocatalytic properties : 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 k) Substances or mixtures which, in contact with match applicable m) Oxidising liquids : not applicable m) Oxidising liquids : not applicable m) Oxidising provides : not applicable m) Oxidising reprovides : not applicable m) Oxidising provides : not applicable p) Corrosive to metals : See section 7 of the safety data sheet. q) Desensitised explosives : not applicable p) Corrosive to metals : see section 7 of the safety data sheet. q) Desensitised explosible dust/air mixtures : not applicable b) Self-accelerating polymerisation temperature (SAPT) : not applicable c) formation of explosible dust/air mixtures : not applicable<					÷			
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h) Self-reactive substances and mixtures in ot applicable i) Pyrophoric liquids in ot applicable i) Pyrophoric solids in ot applicable k) Self-heating substances and mixtures in ot applicable i) Substances or mixtures which, in contact with water, emit flammable gases in ot applicable m) Oxidizing liquids in ot applicable o) Organic peroxides in ot applicable o) Characteristics and applicable o) Organical sensitivity in ot applicable b) Self-accelerating polymerisation temperature in ot		'			:			
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 f) miscibility : Water: completely miscible g) Conductivity : ~ 1800 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 l) photocatalytic properties : not applicable J) photocatalytic properties : not applicable 					:			
 g) Conductivity : ~1800 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 l) photocatalytic properties : not applicable Additional hazards 					:			
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i) gas group : not applicable j) Redox potential : not applicable k) radical formation potential : not applicable l) photocatalytic properties : not applicable Additional hazards		h)	Corrosiveness		:			
j) Redox potential : not applicable k) radical formation potential : not applicable l) photocatalytic properties : not applicable Additional hazards .								
k) radical formation potential : not applicable l) photocatalytic properties : not applicable Additional hazards		i)			:			
I) photocatalytic properties : not applicable Additional hazards		j)	-		:	not applicable		
Additional hazards		k)			:			
		I)	photocatalytic properties		:	not applicable		
Breathing is not possible whilst submerged in the foam. Take care when spraying people!								
		Bre	athing is not possible whilst submerged	d in the foar	n. Ta	ke care when spraying people!		



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SEC [®]	TION 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

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

a) Acute toxicity Acute oral toxicity Preparation related information LD50 > 2000 mg/kg The acute oral toxicity is corresponding to GHS-category 5. Species Rat Method On basis of test data.: OECD 420 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:





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L	.D50 (14d) 1200 mg/kg ==>
ŀ	Harmful if swallowed.
(Source: ECHA database «Registered substances»)
ALKYLPC	DLYGLYCOSIDE:
L	.D50 (14d) > 2000 mg/kg ==>
	The acute oral toxicity is corresponding to GHS-category 5.
(Source: ECHA database «Registered substances»)
FLUORO	SURFACTANT:
L	.D50 (14d) > 5000 mg/kg ==>
	The acute oral toxicity is corresponding to GHS-category 5.
· ·	Source: ECHA database «Registered substances»)
INGREDI	ENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
٦	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 der	mal toxicity
Preparatio	on related information
There are	no data available on the mixture itself.
Informatio	n on ingredients
1,2-ETHA	
	_D50 (14d) > 3500 mg/kg ==>
	The acute dermal toxicity is corresponding to GHS-category 5.
	Source: ECHA database «Registered substances»)
	DXYETHOXY)ETHANOL:
•	.D50 (1d) 2764 mg/kg ==>
٦	The acute dermal toxicity is corresponding to GHS-category 5.
(Source: ECHA database «Registered substances»)
OCTYLSI	
	.D50 (14d) > 2000 mg/kg ==>
	The acute dermal toxicity is corresponding to GHS-category 5.
	Source: ECHA database «Registered substances»)
DECYLSU	
	D50 (14d) > 2000 mg/kg ==>
	The acute dermal toxicity is corresponding to GHS-category 5.
	Source: ECHA database «Registered substances»)
	DLYGLYCOSIDE:
	D50 (14d) > 2000 mg/kg ==>
	The acute dermal toxicity is corresponding to GHS-category 5.
•	Source: ECHA database «Registered substances»)
	SURFACTANT:
	.D50 (14d) > 5000 mg/kg ==>
	The acute dermal toxicity is corresponding to GHS-category 5.
	Source: ECHA database «Registered substances»)
	ENTS 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 inh	alation toxicity
Preparatio	on related information
There are	no data available on the mixture itself.
Informatio	n on ingredients
1,2-ETHA	
,	LC50 (6h) > 2,5 mg/L ==>
L	



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	Source: ECHA database «Registered substances»)
•	DXYETHOXY)ETHANOL:
	NOEC (2h) 29 ppm ==>
	The acute inhalation toxicity related to vapours is corresponding to GHS-category 5.
	Source: ECHA database «Registered substances»)
OCTYLSU	
	lo data available lo information available. No classification in the above-mentioned hazard class
DECYLSU	Source: Safety Data Sheet)
	No data available
	to information available. No classification in the above-mentioned hazard class
	Source: Safety Data Sheet)
,	DLYGLYCOSIDE:
	lo data available
Ν	lo information available. No classification in the above-mentioned hazard class
(?	Source: Safety Data Sheet)
•	SURFACTANT:
Ν	lo data available
Ν	lo information available. No classification in the above-mentioned hazard class
,	Source: Safety Data Sheet)
	ENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
	he substances are not classified as dangerous according to Regulation (EC) No. 1272/2008 [CLP].
-	to classification in the above-mentioned hazard class
(\$	Source: Safety Data Sheet)
b) Skin	corrosion/irritation
•	n related information
non-irritant	
	Albino rabbit
Method	On basis of test data.: OECD 404
	n on ingredients
1,2-ETHA	
,	ion-irritant.
	Source: Safety Data Sheet)
•	DXYETHOXY)ETHANOL:
•	ion-irritant.
(Source: Safety Data Sheet)
OCTYLSÌ	
C	Causes skin irritation.
(!	Source: Safety Data Sheet)
DECYLSU	ILFATE:
C	Causes skin irritation.
(5	Source: Safety Data Sheet)
ALKYLPO	DLYGLYCOSIDE:
	ion-irritant.
•	Source: Safety Data Sheet)
	SURFACTANT:
	ion-irritant.
,	Source: Safety Data Sheet)
	ENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES:
	ion-irritant.
(\$	Source: Safety Data Sheet)
\ - ·	1 P. M. M.
-	us eye damage/irritation
LIEDal glig	n related information





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Causes eye irritation. Species Albino rabbit On basis of test data.: OECD 404 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) FLUOROSURFACTANT: Causes serious eye irritation. (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) FLUOROSURFACTANT: not sensitising. (Source: Safety Data Sheet) INGREDIENTS NOT CLASSIFIED AS HAZARDOUS SUBSTANCES: not sensitising. (Source: Safety Data Sheet) e) Germ cell mutagenicity Preparation related information





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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)	
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)	
(Source. Salely 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)	
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)	
· · · · · ·	
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:	





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	man reproductive toxicity exist.
(Source: Safety Data	a Sheet)
OCTYLSULFATE:	
	man reproductive toxicity exist.
(Source: Safety Data	a Sheet)
DECYLSULFATE:	and a second
	man reproductive toxicity exist.
(Source: Safety Data ALKYLPOLYGLYCOSIDE:	a Sneet)
	mon ronroductivo tovioitu oviat
(Source: Safety Data	man reproductive toxicity exist.
FLUOROSURFACTANT:	
	man reproductive toxicity exist.
(Source: Safety Data	
	NIFIED AS HAZARDOUS SUBSTANCES:
	man reproductive toxicity exist.
(Source: Safety Data	
 h) STOT-single exposure Preparation related information 	
There are no data available o	
Information on ingredients	
1,2-ETHANDIOL: No known symptom	s to dato
(Source: Safety Data	
2-(2-BUTOXYETHOXY)ETH	
No known symptom	
(Source: Safety Data	
OCTYLSULFATE:	
No known symptom	s to date.
(Source: Safety Data	
DECYLSULFATE:	,
No known symptom	s to date.
(Source: Safety Data	a Sheet)
ALKYLPOLYGLYCOSIDE:	
No known symptom	s to date.
(Source: Safety Data	a Sheet)
FLUOROSURFACTANT:	
No known symptom	
(Source: Safety Data	,
	IFIED AS HAZARDOUS SUBSTANCES:
No known symptom	
(Source: Safety Data	a Sheet)
i) STOT-repeated exposu	re
Preparation related informatic	
There are no data available o	
Information on ingredients	
1,2-ETHANDIOL:	
	to kidneys through prolonged or repeated exposure if swallowed.
(Source: Safety Data	
2-(2-BUTOXYETHOXY)ETH	
No known symptom	
(Source: Safety Data OCTYLSULFATE:	
No known symptom	s to data
NO KHOWH SYMPTOM	5 10 Uaic.



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	(Source: Safety Data Sheet)
	DECYLSULFATE:
	No known symptoms to date.
	(Source: Safety Data Sheet)
	ALKYLPOLYGLYCOSIDE:
	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)
	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)
	(Source: Salety Bala Oncer)
44.0	Information on other benerida
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.



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Dr. STHAMER HAMBURG

(Source: Safety Data Sheet) ALKYLPOLYGLYCOSIDE: 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

•	IUNICITY					
	Acute (short-term) fish toxicity					
	Preparation related information					
	Effective dose LC50	:~1500 mg/L				
	Exposure time	: 96 h				
	Species	: Leuciscus idus (golden orfe)				
	Method	: On basis of test data.: OECD 203				
	Information on ingredients					
	1,2-ETHANDIOL:					
	LC50 (96h) > 72860 mg/					
	(Source: ECHA database	e «Registered substances»)				
	2-(2-BUTOXYETHOXY)ETHANO	L:				
	LC50 (96hr) 1300mg/L					
		e «Registered substances»)				
	OCTYLSULFATE:					
	LC50 (96h) > 100 mg/L;					
	(Source: ECHA database DECYLSULFATE:	e «Registered substances»)				
	LC50 (48h) 13 mg/L (Source: ECHA database	e «Registered substances»)				
	ALKYLPOLYGLYCOSIDE:					
	LC50 (96h) 100,81 mg/L					
	() · · •	e «Registered substances»)				
	FLUOROSURFACTANT:					
	LC50 (96h) > 35 mg/L					
		e «Registered substances»)				
	INGREDIENTS NOT CLASSIFIED	D AS HAZARDOUS SUBSTANCES:				
	No classification in the at	pove-mentioned hazard class				
	(Source: Safety Data She	eet)				
	Acute (short-term) toxicity to cr	ustacea				
	Preparation related information					
	Effective dose EC50	:~352 mg/L				
	Exposure time	: 48 h				
	Species	: Daphnia magna (Big water flea)				
	Method	: On basis of test data.: OECD 202				
	Information on ingredients					
	1,2-ETHANDIOL:					
	EC50 (48h) > 13900 mg	/L				





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(Source: E	CHA database «Registered sul	bstances»)		
2-(2-BUTOXYETHC	XY)ETHANOL:			
	r) > 1101 mg/L			
	CHA database «Registered sul	bstances»)		
OCTYLSULFATE:				
) > 100 mg/L; NOEC (48 h) 100			
(Source: E	CHA database «Registered sul	bstances»)		
DECYLSULFATE:				
) > 100 mg/L			
,	CHA database «Registered sul	bstances»)		
ALKYLPOLYGLYC				
· · ·) > 100 mg/L			
,	CHA database «Registered sul	bstances»)		
FLUOROSURFACT				
EC50 (48h)				
	CHA database «Registered sul			
	T CLASSIFIED AS HAZARDO		JES.	
	ation in the above-mentioned h	hazard class		
(Source: Sa	afety Data Sheet)			
Aquita (about tama)	tovicity to class and success-	ootorio		
	toxicity to algae and cyanob	acteria		
Preparation related i		п		
Effective dose	EC50 : ~ 142	mg/L		
Exposure time	: 72 h			
Species	: Scenedesmus	•		
Method	: On basis of te	st data.: OECD	201	
Information on ingree	dients			
1,2-ETHANDIOL:				
) > 6500 mg/L; NOEC (96h) 47			
	CHA database «Registered sul	bstances»)		
2-(2-BUTOXYETHC	,			
) 1 101 mg/L			
	CHA database «Registered sul	ostances»)		
OCTYLSULFATE:				
) > 511 mg/L; NOEC (72h) 199			
(Source: E) DECYLSULFATE:	CHA database «Registered sul	ustances»)		
) 8,64 mg/L; NOEC (72h) 0,95	ma/l		
· · ·	• • • • • •	•		
(Source: E) ALKYLPOLYGLYC	CHA database «Registered sul סאספי	usidiiues»)		
) 27,22 mg/L; NOEC (72h) 6,25	5 ma/l		
	CHA database «Registered sul			
FLUOROSURFACT		001011000/		
EC50 (72h)				
	CHA database «Registered sul	bstances»)		
· ·	T CLASSIFIED AS HAZARDO	,	CES:	
	ation in the above-mentioned h		-	
	afety Data Sheet)			
,	- ,			
Effects in sewage p	olants			
Preparation related i				
	: Respiratory inhibition of mur	nicipal activated	sludae.	
5000 mg/L	 Concentration 	: 100%	Dilution	: > 200
50000 mg/L	 Concentration 	: 1%	Dilution	:>200
•	: On basis of test data.: DIN 3			. ~ 2
		ω+ι∠/μαιι 3 (Π	0)	
Information on ingree	uients			





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1,2-ethandiol:	
NOEC (0,5h) > 1	995 mg/L
(Source: ECHA of	database «Registered substances»)
2-(2-BUTOXYETHOXY)E	THANOL:
NOEC (0,5h) 199	95 mg/L
(Source: ECHA of	database «Registered substances»)
OCTYLSULFATE:	
EC50 (3h) 135 m	ng/L
(Source: ECHA o	database «Registered substances»)
DECYLSULFATE:	
EC50 (3h) 135 m	ng/L
. ,	database «Registered substances»)
ALKYLPOLYGLYCOSIDE	
EC50 (6h) > 560	mg/L
(Source: ECHA of	database «Registered substances»)
FLUOROSURFACTANT:	
EC50 (3h) >1000	-
	latabase «Registered substances»)
	SSIFIED AS HAZARDOUS SUBSTANCES:
No classification	in the above-mentioned hazard class
(Source: Safety I	Data Sheet)
The product contains fluor	no utatata tatana nat completalu biodogradable
Some of the components	osurfactants that are not completely biodegradable.
some of the components	are poorly biodegradable.
Remark	
Observe local regulations	concerning effluent treatment.
-	concerning effluent treatment.
Observe local regulations Special pre-treatments are	-
Special pre-treatments are	e necessary.
-	e necessary.
Special pre-treatments are Persistence and	e necessary. degradability
Special pre-treatments are Persistence and Biodegradation Preparation related inform	a necessary. degradability
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac	e necessary. degradability ation coording to OECD criteria).
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information	ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable.
Special pre-treatments are Persistence and Biodegradation <u>Preparation related inform</u> Readily biodegradable (ac Additional information Degradation rate	ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95%
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration	ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD).
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL:	ation according to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEd	ation according to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OE Readily biodegra	ation ation coording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OE Readily biodegra (Source: ECHA of	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment :: CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL:
Special pre-treatments are Persistence and a Biodegradation <u>Preparation related inform</u> Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type <u>Information on ingredients</u> <i>1,2-ETHANDIOL:</i> > 90% (10d) OE Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECL	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment :: CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: 0 301 E
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEt Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECL Readily biodegra	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment : CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: D 301 E dable (according to OECD criteria).
Special pre-treatments are Persistence and a Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEI Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECI Readily biodegra (Source: ECHA of	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment :: CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: 0 301 E
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEU Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECU Readily biodegra (Source: ECHA of OCTYLSULFATE:	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment CD 301A dable (according to OECD criteria). database «Registered substances») THANOL: D 301 E dable (according to OECD criteria). database «Registered substances»)
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEU Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECU Readily biodegra (Source: ECHA of OCTYLSULFATE: 93,5% (29d) OEU	ation ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment : CD 301A dable (according to OECD criteria). tdatabase «Registered substances») THANOL: O 301 E dable (according to OECD criteria). tdatabase «Registered substances») CD 301 B
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECC Readily biodegra (Source: ECHA of OCTYLSULFATE: 93,5% (29d) OEC Readily biodegra	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment : CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: O 301 E dable (according to OECD criteria). tatabase «Registered substances») CD 301 B dable (according to OECD criteria). tatabase «Registered substances»)
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 2-(2-BUTOXYETHOXY)E 92% (28d) OECL Readily biodegra (Source: ECHA of OCTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of (Source: ECHA of (S	ation ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment : CD 301A dable (according to OECD criteria). tdatabase «Registered substances») THANOL: O 301 E dable (according to OECD criteria). tdatabase «Registered substances») CD 301 B
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of DECYLSULFATE:	ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment :: CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: D 301 E dable (according to OECD criteria). latabase «Registered substances») CD 301 B dable (according to OECD criteria). latabase «Registered substances»)
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of DECYLSULFATE: 92% (30d) OECT	ation scording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment : CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: D 301 E dable (according to OECD criteria). tatabase «Registered substances») CD 301 B dable (according to OECD criteria). tatabase «Registered substances») CD 301 B dable (according to OECD criteria). tatabase «Registered substances») CD 301 B dable (according to OECD criteria). tatabase «Registered substances») CD 301 B dable (according to OECD criteria). tatabase «Registered substances») CD 301 D
Special pre-treatments are Persistence and Biodegradation Preparation related inform Readily biodegradable (ac Additional information Degradation rate Test duration Analytical method Method Type Information on ingredients 1,2-ETHANDIOL: > 90% (10d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of 0CTYLSULFATE: 93,5% (29d) OEC Readily biodegra (Source: ECHA of DECYLSULFATE: 92% (30d) OECT	ation cording to OECD criteria). : The product contains fluorosurfactants that are not completely biodegradable. : ~ 95% : 14 d : BOD (% of COD). : On basis of test data.: OECD 301F : Aerobic biological treatment :: CD 301A dable (according to OECD criteria). tatabase «Registered substances») THANOL: D 301 E dable (according to OECD criteria). latabase «Registered substances») CD 301 B dable (according to OECD criteria). latabase «Registered substances»)





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	(Source: ECHA database «Registered s ALKYLPOLYGLYCOSIDE: 70% (28d) OECD 301 A Readily biodegradable (according to OE (Source: ECHA database «Registered s FLUOROSURFACTANT:	CD criteria	ı).			
	0% (28d) OECD 301 F Not readily biodegradable (according to	OFCD crit	eria)			
	(Source: ECHA database «Registered s	substances	»)			
	INGREDIENTS NOT CLASSIFIED AS HAZARD > 70% (28d) OECD 301	OUS SUB	STANCES:			
	Readily biodegradable (according to OE	CD criteria	i).			
	(Source: Safety Data Sheet)					
	Chemical oyxgen demand (COD)					
	~941000 mg*O2/L ► Concentration	: 100%	Method	DIN EN 38409-H4		
	~ 9410 mg*O2/L ► Concentration	: 1%	Method	DIN EN 38409-H4	.1-1	
	Biochemical oxygen demand					
	~ 599000 mg*O2/L ► Concentration	: 100%	Method	DIN EN 1899-1	Test duration	5 d
	~ 5990 mg*O2/L ► Concentration	: 1%	Method	DIN EN 1899-1	Test duration	5 d
	BOD5/COD ratio					
	64%					
12.3	Bioaccumulative potential Preparation related information					
	There are no data available on the mixture itself.					
	Information on ingredients					
	1,2-ETHANDIOL:					
	log Kow -1,36					
	No indication of bioaccumulation potenti					
	(Source: ECHA database «Registered s	substances	»)			
	2-(2-BUTOXYETHOXY)ETHANOL: log Kow < 3					
	No indication of bioaccumulation potenti	ial				
	(Source: ECHA database «Registered s		»)			
	OCTYLSULFATE:		,			
	log Pow < -2.31					
	No indication of bioaccumulation potenti		`			
	(Source: ECHA database «Registered s DECYLSULFATE:	substances	»)			
	log Pow 1.72					
	No indication of bioaccumulation potenti	ial.				
	(Source: ECHA database «Registered s	substances	»)			
	ALKYLPOLYGLYCOSIDE:					
	log Kow < 1,77 No indication of bioaccumulation potenti	ial				
	(Source: ECHA database «Registered s		»)			
	FLUOROSURFACTANT:		1			
	BCF < 5,1					
	No indication of bioaccumulation potenti		,			
	(Source: ECHA database «Registered s					
	INGREDIENTS NOT CLASSIFIED AS HAZARD No classification in the above-mentioned					
	No information available. No classification			azard class		
						ľ





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	(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 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.
	(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)
	ALKYLPOLYGLYCOSIDE:
	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.
	(Source: Safety Data Sheet)
12.6	Endocrine disrupting properties
1210	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)
	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)
	(Source. Salety Data Sheet)





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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 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.

: No

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

14.6 Special precautions for user





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none

14.7 Maritime transport in bulk according to IMO instruments not applicable

SECTION 15: Regulatory information

15.1	Safety, health and environmental regulations/legislation specific for the substance or			
	mixture			
	EU legislation			
	Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer.			
	not applicable			
	Regulation (EC) No. 304/2003 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.			
	Regulation (EC) No 2020/784 [PFOA-Regulation]			
	The product fulfills all requirements and limit values of this EU regulation.			
	Regulation (EC) No 2021/1297 [C9-C14-PFCA-Regulation]			
	The product fulfills all requirements and limit values of this EU regulation.			
	National regulations			
	Störfallverordnung			
	This product is not classified according to StörfallVO.			
	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.			



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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% application solution of MOUSSOL-APS LV 1/1 F-25 #6141:

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.

Relevant R-, H- and EUH-phrases (Number and full text)

H302 Harmful if swallowed or if inhaled.
H315 Causes skin and eye irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H373.8 May cause damage to kidneys through prolonged or repeated exposure if swallowed.
H411 Toxic to aquatic life with long lasting effects.