Safety Data Sheet

According to Regulation (EC) No 1907/2006

Bryta Oven & Grill Foam Cleaner

Revision: 2021-04-04 **Version:** 03.0

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

1.1 Product identifier
Trade name: Bryta Oven & Grill Foam Cleaner

UFI: PQ43-S01T-5002-FVM6

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

Product use:	Oven/Grill cleaner. For professional use only.
Uses advised against:	Uses other than those identified are not recommended.

SWED - Sector-specific worker exposure description :
AISE_SWED_PW_10_2
AISE_SWED_PW_11_2
AISE_SWED_PW_19_2

1.3 Details of the supplier of the safety data sheet
Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details
Diversey Hygiene Sales Limited
Jamestown Road, Finglas, Dublin 11, Ireland
Tel: 01 8081808 (9am - 5pm Mon-Fri)
Email: dublin.orders@diversey.com

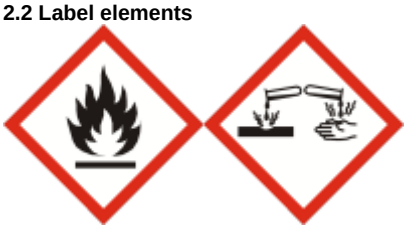
1.4 Emergency telephone number
Seek medical advice (show the label or safety data sheet where possible)
National Poisons Information Centre
Tel: 01 809 2166. (8.00 a.m. to 10.00 p.m. 7 days a week)
Tel: 01 809 2566 (health care professionals)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosol 1 (H222)
Skin Corr. 1B (H314)
Eye Dam. 1 (H318)
Met. Corr. 1 (H290)

2.2 Label elements



Signal word: Danger.

Contains alkyl alcohol ethoxylate (Trideceth 7-10), sodium hydroxide (Sodium Hydroxide)

Hazard statements:
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H314 - Causes severe skin burns and eye damage.
H290 - May be corrosive to metals.

Precautionary statements:
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTRE, doctor or physician.
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

2.3 Other hazards
No other hazards known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
alkyl alcohol ethoxylate	[4]	69011-36-5	[4]	Acute Tox. 4 (H302) Eye Dam. 1 (H318)		3-10
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified as hazardous		3-10
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		3-10
butane	203-448-7	106-97-8	01-2119474691-32	Flam. Gas 1 (H220) Press. Gas (Comp.) (H280)		1-3
propane	200-827-9	74-98-6	01-2119486944-21	Flam. Gas 1 (H220) Press. Gas (Comp.) (H280)		1-3

Specific concentration limits
alkyl alcohol ethoxylate:
• Eye Dam. 1 (H318) >= 10% > Eye Irrit. 2 (H319) >= 1%
sodium hydroxide:
• Met. Corr. 1 (H290) >= 0.5%
• Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
• Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.
ATE, if available, are listed in section 11.
[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.
For the full text of the H and EUH phrases mentioned in this Section, see Section 16..

SECTION 4: First aid measures

4.1 Description of first aid measures

General Information: If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.

Inhalation: Get medical attention or advice if you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician.

Eye contact: Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE, doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: Causes severe burns. Direct contact can damage skin by freezing.

Eye contact: Direct contact can damage the eye by freezing. Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of oesophagus and stomach.

4.3 Indication of any immediate medical attention and special treatment needed
No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture
Cool endangered packaging with water spray jet.

5.3 Advice for firefighters
As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear suitable protective clothing. Wear suitable gloves. Wear eye/face protection.

6.2 Environmental precautions
No special environmental precautions required.

6.3 Methods and material for containment and cleaning up
Use neutralising agent. Absorb liquid components with liquid-binding material.

6.4 Reference to other sections
For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Measures to prevent fire and explosions:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50° C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Use non-sparking tools.

Measures required to protect the environment:
For environmental exposure controls see subsection 8.2.

Advices on general occupational hygiene:
Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Do not breathe spray. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities
Store in accordance with local and national regulations. Keep away from heat and direct sunlight.
For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Seveso - Lower Tier requirements (tonnes): 150
Seveso - Upper Tier requirements (tonnes): 500

7.3 Specific end use(s)
No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Workplace exposure limits

Air limit values, if available:

Ingredient(s)	Long term value(s)	Short term value(s)
propane-1,2-diol	10 mg/m³ particulates 150 ppm total vapour and particulates 470 mg/m³ total vapour and particulates	1410 mg/m³ particulates 30 mg/m³ 450 ppm total vapour and particulates
sodium hydroxide		2 mg/m³
butane	1000 ppm	3000 ppm
propane		3000 ppm

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

DNEL/DMEL and PNEC values

Human exposure

DNEL oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	-	-	-	85
sodium hydroxide	-	-	-	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

DNEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	-	-	-	-
sodium hydroxide	2 %	-	-	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

DNEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	-	-	-	213
sodium hydroxide	2 %	-	-	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	-	-	10	168
sodium hydroxide	-	-	1	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	-	-	10	50
sodium hydroxide	-	-	1	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

Environmental exposure

Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	260	26	183	20000
sodium hydroxide	-	-	-	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
alkyl alcohol ethoxylate	-	-	-	-
propane-1,2-diol	572	57.2	50	-
sodium hydroxide	-	-	-	-
butane	No data available	No data available	No data available	No data available
propane	No data available	No data available	No data available	No data available

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet.
If available, please refer to the product information sheet for application and handling instructions.
Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Appropriate engineering controls: Provide a good standard of general ventilation. Ensure that foam equipment does not generate respirable particles. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling with automatic systems. Use tools for manual handling of product.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel. Users are advised to consider national Occupational Exposure Limits or other equivalent values, if available.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Manual application by brushing, wiping or mopping	AISE_SWED_PW_10_2	PW	PROC 10	480	ERC8a
Foam spraying	AISE_SWED_PW_11_2	PW	PROC 11	60	ERC8a
Manual application	AISE_SWED_PW_19_2	PW	PROC 19	480	ERC8a

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166).

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.
Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material thickness: ≥ 0.7 mm
Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min Material thickness: ≥ 0.4 mm
In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.

Body protection: No special requirements under normal use conditions. Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur (EN 14605).

Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided. Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Information in this section refers to the product, unless it is specifically stated that substance data is listed

	Method / remark
Physical State: Aerosol	
Colour: Colourless	
Odour: Product specific	
Odour threshold: Not applicable	
Melting point/freezing point (°C): Not determined	Not relevant to classification of this product
Initial boiling point and boiling range (°C): Not determined	Not applicable as product is an aerosol

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
alkyl alcohol ethoxylate	> 200	Method not given	
propane-1,2-diol	185-190	Method not given	1013
sodium hydroxide	> 990	Method not given	
butane	No data available		
propane	No data available		

	Method / remark
Flammability (solid, gas): Not determined	
Flammability (liquid): Not applicable. Not flammable.	
Flash point (°C): Not applicable as product is an aerosol < 100 °C	open cup
Sustained combustion: Not applicable. *(UN Manual of Tests and Criteria, section 32, L.2)*	
Lower and upper explosion limit/flammability limit (%): Not determined	See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propane-1,2-diol	2.6	12.6

	Method / remark
Autoignition temperature: Not determined	
Decomposition temperature: Not applicable.	
pH: > 11 (neat)	ISO 4316
Kinematic viscosity: Not determined	Not relevant to classification of this product
Solubility in / Miscibility with Water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
alkyl alcohol ethoxylate	Soluble	Method not given	20
propane-1,2-diol	Soluble	Method not given	
sodium hydroxide	1000	Method not given	20
butane	No data available		
propane	No data available		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

	Method / remark
Vapour pressure: Not determined	See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
alkyl alcohol ethoxylate	Negligible	Method not given	20-25
propane-1,2-diol	18.6	Method not given	20
sodium hydroxide	< 1330	Method not given	20
butane	No data available		
propane	No data available		

	Method / remark
Relative density: ≈ 1.01 (20 °C)	OECD 109 (EU A.3)
Relative vapour density: No data available.	Not relevant to classification of this product
Particle characteristics: No data available.	Not applicable to liquids.

9.2 Other information
9.2.1 Information with regard to physical hazard classes
Explosive properties: Vapours may form explosive mixtures with air. Not explosive.
Oxidising properties: Not oxidising.
Corrosion to metals: Corrosive

9.2.2 Other safety characteristics
Alkali reserve: ≈ 2.8 (g NaOH / 100g; pH=10)

SECTION 10: Stability and reactivity

10.1 Reactivity
No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability
Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid
None known under normal storage and use conditions.

10.5 Incompatible materials
May be corrosive to metals. Reacts with acids.

10.6 Hazardous decomposition products
None known under normal storage and use conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):
ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
alkyl alcohol ethoxylate	LD_{50}	> 300-2000	Rat	OECD 423 (EU B.1 tris)		17000
propane-1,2-diol	LD_{50}	> 10000	Rat	Method not given		Not established
sodium hydroxide		No data available				Not established
butane		No data available				Not established
propane		No data available				Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
alkyl alcohol ethoxylate	LD_{50}	> 2000	Rabbit	Method not given		Not established
propane-1,2-diol	LD_{50}	> 2000	Rabbit	Method not given		Not established
sodium hydroxide	LD_{50}	1350	Rabbit	Method not given		Not established
butane		No data available				Not established
propane		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate		No data available			
propane-1,2-diol	LC_{50}	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
sodium hydroxide		No data available			
butane		No data available			
propane		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
alkyl alcohol ethoxylate	Not established	Not established	Not established	Not established
propane-1,2-diol	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established
butane	Not established	Not established	Not established	Not established
propane	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Not irritant	Rabbit	OECD 404 (EU B.4)	
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
butane	No data available			
propane	No data available			

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	Severe damage	Rabbit	Method not given	

propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
butane	No data available			
propane	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
propane-1,2-diol	No data available			
sodium hydroxide	No data available			
butane	No data available			
propane	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	Not sensitising	Guinea pig	Method not given	
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
sodium hydroxide	Not sensitising		Human repeated patch test	
butane	No data available			
propane	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
alkyl alcohol ethoxylate	No data available			
propane-1,2-diol	No data available			
sodium hydroxide	No data available			
butane	No data available			
propane	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
alkyl alcohol ethoxylate	No evidence of genotoxicity, negative test results	Method not given	No evidence of genotoxicity, negative test results	Method not given
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
sodium hydroxide	No evidence for mutagenicity, negative test results	DNA repair test on rat hepatocytes OECD 473	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
butane	No data available		No data available	
propane	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
alkyl alcohol ethoxylate	No evidence for carcinogenicity, weight-of-evidence
propane-1,2-diol	No evidence for carcinogenicity, negative test results
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
butane	No data available
propane	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
alkyl alcohol ethoxylate	NOAEL	Teratogenic effects	> 50	Rat	Not known		No known significant effects or critical hazards
propane-1,2-diol			No data available				No evidence for reproductive toxicity
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
butane			No data available				
propane			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol		No data available				
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol		No data available				
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol		No data available				
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
alkyl alcohol ethoxylate	Oral	NOAEL	50	Rat	Method not given	24 month(s)	Effects on organ weights	
propane-1,2-diol			No data available					
sodium hydroxide			No data available					
butane			No data available					
propane			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
propane-1,2-diol	No data available
sodium hydroxide	No data available
butane	No data available
propane	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
alkyl alcohol ethoxylate	Not applicable
propane-1,2-diol	No data available
sodium hydroxide	No data available
butane	No data available
propane	No data available

Aspiration hazard
Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms
Effects and symptoms related to the product, if any, are listed in subsection 4.2.

11.2 Information on other hazards
11.2.1 Endocrine disrupting properties
Endocrine disrupting properties - Human data, if available:

11.2.2 Other information
No other relevant information available.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity
Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	LC_{50}	1 - 10	*Cyprinus carpio*	OECD 203 (EU C.1)	96
propane-1,2-diol	LC_{50}	> 1000	*Fish*	Method not given	24
sodium hydroxide	LC_{50}	35	*Various species*	Method not given	96
butane		No data available			
propane		No data available			

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Daphnia magna Straus*	OECD 202, static	48
propane-1,2-diol	EC_{50}	> 100	*Daphnia*	Method not given	48
sodium hydroxide	EC_{50}	40.4	*Ceriodaphnia sp.*	Method not given	48
butane		No data available			
propane		No data available			

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
alkyl alcohol ethoxylate	EC_{50}	1 - 10	*Desmodesmus subspicatus*	OECD 201, static	72
propane-1,2-diol	EC_{50}	24200	*Desmodesmus subspicatus*	OECD 201 (EU C.3)	72
sodium hydroxide	EC_{50}	22	*Photobacterium phosphoreum*	Method not given	0.25
butane		No data available			
propane		No data available			

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
alkyl alcohol ethoxylate		No data available			
propane-1,2-diol		No data available			
sodium hydroxide		No data available			
butane		No data available			
propane		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
alkyl alcohol ethoxylate	EC_{10}	> 10000	*Activated sludge*	DIN 38412 / Part 8	17 hour(s)
propane-1,2-diol	EC_{0}	> 20000	*Pseudomonas putida*	Method not given	18 hour(s)
sodium hydroxide		No data available			
butane		No data available			
propane		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol		No data available				
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol	NOEC	13020	*Ceriodaphnia dubia*	Method not given	7 day(s)	
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate		No data available				
propane-1,2-diol		No data available				
sodium hydroxide		No data available				
butane		No data available				
propane		No data available				

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	220	*Eisenia fetida*			

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
alkyl alcohol ethoxylate	NOEC	10	*Lepidium sativum*	OECD 208		

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT_{50}	Method	Evaluation
alkyl alcohol ethoxylate	Activated sludge, aerobe	CO_2 production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
sodium hydroxide					Not applicable (inorganic substance)
butane					Readily biodegradable
propane					Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
alkyl alcohol ethoxylate	-		No bioaccumulation expected	
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
butane	No data available			
propane	No data available			

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
alkyl alcohol ethoxylate	-			No bioaccumulation expected	
propane-1,2-diol	No data available				
sodium hydroxide	No data available				
butane	No data available				
propane	No data available				

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
alkyl alcohol ethoxylate	No data available				Immobile in soil or sediment
propane-1,2-diol	No data available				Potential for mobility in soil, soluble in water
sodium hydroxide	No data available				Mobile in soil
butane	No data available				
propane	No data available				

12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

12.7 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues / unused products: The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

European Waste Catalogue: 16 05 04* - gases in pressure containers (including halons) containing dangerous substances.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 1950

14.2 UN proper shipping name:
Aerosols

14.3 Transport hazard class(es):
Transport hazard class (and subsidiary risks): 2.1(8)

14.4 Packing group: -

14.5 Environmental hazards:
Environmentally hazardous: No
Marine pollutant: No

14.6 Special precautions for user: None known.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: The product is not transported in bulk tankers.

Other relevant information:

ADR
Classification code: 5FC
Tunnel restriction code: E
Hazard identification number: -

IMO/IMDG
EmS: F-D, S-U

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code
Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:
• Regulation (EC) No. 1907/2006 - REACH
• Regulation (EC) No 1272/2008 - CLP
• Regulation (EC) No. 648/2004 - Detergents regulation
• Directive 75/324/EEC on aerosol dispensers
• substances identified as having endocrine disrupting properties in accordance with the criteria set out in Delegated Regulation (EU) 2017/2100 or Regulation (EU) 2018/605

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants	5 - 15 %
aliphatic hydrocarbons	< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Seveso - Classification: P3a - FLAMMABLE AEROSOLS

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out on the mixture

SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS1003503 **Version:** 03.0 **Revision:** 2021-04-04

Reason for revision:
Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 2, 3, 6, 8, 16

Classification procedure
The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

Full text of the H and EUH phrases mentioned in section 3:
• H220 - Extremely flammable gas.
• H280 - Contains gas under pressure; may explode if heated.
• H290 - May be corrosive to metals.
• H302 - Harmful if swallowed.
• H314 - Causes severe skin burns and eye damage.
• H318 - Causes serious eye damage.

Abbreviations and acronyms:
• AISE - The international Association for Soaps, Detergents and Maintenance Products
• ATE - Acute Toxicity Estimate
• DNEL - Derived No Effect Limit
• EC50 - effective concentration, 50%
• ERC - Environmental release categories
• EUH - CLP Specific hazard statement
• LC50 - Lethal Concentration, 50% / Median Lethal Concentration
• LCS - Life cycle stage
• LD50 - Lethal Dose, 50% / Median Lethal dose
• NOAEL - No observed adverse effect level
• NOEL - No observed effect level
• OECD - Organization for Economic Cooperation and Development
• PBT - Persistent, Bioaccumulative and Toxic
• PNEC - Predicted No Effect Concentration
• PROC - Process categories
• REACH number - REACH registration number, without supplier specific part
• vPvB - very Persistent and very Bioaccumulative

End of Safety Data Sheet