


E4 UNI FORTE**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** E4 UNI FORTE
- Other means of identification:**
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Detergent. For professional users/industrial user only.
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Merida Sp. z o.o.
ul. Karkonoska 59
53 – 015 Wrocław - Dolnoslaskie - Polska
Phone: +48 (71) 33 97 888 - Fax: +48 (71) 33 97 888
grzegorz.pawlak@merida.com.pl
www.merida.com.pl
- 1.4 Emergency telephone number:** +48 71 33 97 888 (godz.: 8.00-15.00 pn-pt) lub całodobowo 112

SECTION 2: HAZARDS IDENTIFICATION **

- 2.1 Classification of the substance or mixture:**
- CLP Regulation (EC) No 1272/2008:**
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Eye Dam. 1: Serious eye damage, Category 1, H318
Met. Corr. 1: Corrosive to metals, Category 1, H290
Skin Corr. 1: Skin corrosion, Category 1, H314
- 2.2 Label elements:**
- CLP Regulation (EC) No 1272/2008:**
Danger
- 
- Hazard statements:**
Met. Corr. 1: H290 - May be corrosive to metals.
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
- Precautionary statements:**
P234: Keep only in original packaging.
P280: Wear protective gloves/protective clothing/eye protection/protective footwear.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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 center/doctor.
- Substances that contribute to the classification**
sodium hydroxide; 2-aminoethanol
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

** Changes with regards to the previous version

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

- 3.1 Substance:**
Non-applicable

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE





SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 1310-73-2 EC: 215-185-5 Index: 011-002-00-6 REACH:01-2119457892-27-XXXX	sodium hydroxide⁽¹⁾ Regulation 1272/2008 Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1A: H314 - Danger	Self-classified  1,5 - <2,5 %
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0 REACH:01-2119475108-36-XXXX	2-butoxyethanol⁽¹⁾ Regulation 1272/2008 Acute Tox. 4: H302+H332; Eye Irrit. 2: H319; Skin Irrit. 2: H315 - Warning	ATP ATP15  0,5 - <1,5 %
CAS: 141-43-5 EC: 205-483-3 Index: 603-030-00-8 REACH:01-2119486455-28-XXXX	2-aminoethanol⁽²⁾ Regulation 1272/2008 Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; STOT SE 3: H335 - Danger	Self-classified   0,5 - <1,5 %

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

⁽²⁾ Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Other information:

Identification	Specific concentration limit
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	% (w/w) >=0,1: Met. Corr. 1 - H290 % (w/w) >=5: Skin Corr. 1A - H314 2<= % (w/w) <5: Skin Corr. 1B - H314 0,5<= % (w/w) <2: Skin Irrit. 2 - H315 % (w/w) >=2: Eye Dam. 1 - H318 0,5<= % (w/w) <2: Eye Irrit. 2 - H319

** Changes with regards to the previous version

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request immediate medical assistance, showing the SDS of this product. Do not induce vomiting, because its expulsion from the stomach can be hazardous to the mucus of the main digestive tract, and also risk damage to the respiratory system through inhalation. Rinse out the mouth and throat, as they may have been affected during ingestion. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE**SECTION 4: FIRST AID MEASURES (continued)**

Non-applicable

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media:****Suitable extinguishing media:**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures:****For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilled product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE**7.1 Precautions for safe handling:****A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used. **KEEP ONLY IN ORIGINAL PACKAGING.**

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE

SECTION 7: HANDLING AND STORAGE (continued)

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: -10 °C

Maximum Temp.: 40 °C

Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification		Occupational exposure limits	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0		IOELV (8h)	20 ppm
		IOELV (STEL)	50 ppm
2-aminoethanol CAS: 141-43-5 EC: 205-483-3		IOELV (8h)	1 ppm
		IOELV (STEL)	3 ppm

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	89 mg/kg	Non-applicable	125 mg/kg	Non-applicable
	Inhalation	1091 mg/m ³	246 mg/m ³	98 mg/m ³	Non-applicable
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1 mg/m ³	0,51 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Oral	Non-applicable	Non-applicable	6,3 mg/kg	Non-applicable
	Dermal	89 mg/kg	Non-applicable	75 mg/kg	Non-applicable
	Inhalation	426 mg/m ³	147 mg/m ³	59 mg/m ³	Non-applicable
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	1,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,18 mg/m ³	0,28 mg/m ³

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

PNEC:

Identification				
2-butoxyethanol	STP	463 mg/L	Fresh water	8,8 mg/L
CAS: 111-76-2	Soil	2,33 mg/kg	Marine water	0,88 mg/L
EC: 203-905-0	Intermittent	26,4 mg/L	Sediment (Fresh water)	34,6 mg/kg
	Oral	0,02 g/kg	Sediment (Marine water)	3,46 mg/kg
2-aminoethanol	STP	100 mg/L	Fresh water	0,07 mg/L
CAS: 141-43-5	Soil	1,29 mg/kg	Marine water	0,007 mg/L
EC: 205-483-3	Intermittent	0,028 mg/L	Sediment (Fresh water)	0,357 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,036 mg/kg

8.2 Exposure controls:



A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)****Volatile organic compounds:**

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	2 % weight
V.O.C. density at 20 °C:	20,38 kg/m ³ (20,38 g/L)
Average carbon number:	4,03
Average molecular weight:	90,24 g/mol

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Fluid
Colour:	Green
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	101 °C
Vapour pressure at 20 °C:	2339 Pa
Vapour pressure at 50 °C:	12324,82 Pa (12,32 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1015 - 1025 kg/m ³
Relative density at 20 °C:	1,041
Dynamic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	12 - 13
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	110 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable
-----------------------------	----------------

9.2 Other information:

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	H290 May be corrosive to metals.
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	Not applicable	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION **

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

The experimental information related to the toxicological properties of the product itself is not available

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Corrosive product, if it is swallowed causes burns destroying the tissues. For more information about secondary effects from skin contact see section 2.

B- Inhalation (acute effect):

** Changes with regards to the previous version

E4 UNI FORTE

SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Prolonged inhalation of the product is corrosive to mucous membranes and the upper respiratory tract
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Above all, skin contact may occur as fabrics of all thicknesses can be destroyed, resulting in burns. For more information on the secondary effects see section 2.
 - Contact with the eyes: Produces serious eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: 2-butoxyethanol (3); Benzyl acetate (3); Indole (2B)
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LD50 oral	1200 mg/kg	Rat
	LD50 dermal	3000 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (ATEi)	
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	LD50 oral	1089 mg/kg	Rat
	LD50 dermal	1100 mg/kg	
	LC50 inhalation	Non-applicable	

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

** Changes with regards to the previous version

SECTION 12: ECOLOGICAL INFORMATION **

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE

SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Acute toxicity:

Identification	Concentration	Species	Genus
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	LC50	189 mg/L (48 h)	Leuciscus idus
	EC50	33 mg/L	Crangon crangon
	EC50	Non-applicable	
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	LC50	1490 mg/L (96 h)	Lepomis macrochirus
	EC50	1815 mg/L (48 h)	Daphnia magna
	EC50	911 mg/L (72 h)	Pseudokirchneriella subcapitata
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	LC50	>10 - 100 mg/L (96 h)	Fish
	EC50	>10 - 100 mg/L (48 h)	Crustacean
	EC50	>10 - 100 mg/L (72 h)	Algae

Chronic toxicity:

Identification	Concentration	Species	Genus
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	NOEC	100 mg/L	Danio rerio
	NOEC	100 mg/L	Daphnia magna
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	NOEC	1,24 mg/L	Oryzias latipes
	NOEC	0,85 mg/L	Daphnia magna

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability	Biodegradability
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BOD5	0,71 g O2/g
	COD	2,2 g O2/g
	BOD5/COD	0,32
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	BOD5	Non-applicable
	COD	Non-applicable
	BOD5/COD	Non-applicable

Concentration	Period	% Biodegradable
100 mg/L	14 days	96 %
20 mg/L	21 days	90 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	BCF
	Pow Log
	Potential
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	BCF
	Pow Log
	Potential

12.4 Mobility in soil:

Identification	Absorption/desorption	Volatility
2-butoxyethanol CAS: 111-76-2 EC: 203-905-0	Koc	Henry
	Conclusion	Dry soil
	Surface tension	Moist soil
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Koc	Henry
	Conclusion	Dry soil
	Surface tension	Moist soil

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

** Changes with regards to the previous version

E4 UNI FORTE

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
20 01 29*	detergents containing hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP8 Corrosive

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:

- 14.1 **UN number or ID number:** Non-applicable
- 14.2 **UN proper shipping name:** Non-applicable
- 14.3 **Transport hazard class(es):** Non-applicable
Labels: Non-applicable
- 14.4 **Packing group:** Non-applicable
- 14.5 **Environmental hazards:** No
- 14.6 **Special precautions for user**
Special regulations: Non-applicable
Tunnel restriction code: Non-applicable
Physico-Chemical properties: see section 9
Limited quantities: Non-applicable
- 14.7 **Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:

- 14.1 **UN number or ID number:** Non-applicable
- 14.2 **UN proper shipping name:** Non-applicable
- 14.3 **Transport hazard class(es):** Non-applicable
Labels: Non-applicable
- 14.4 **Packing group:** Non-applicable
- 14.5 **Marine pollutant:** No
- 14.6 **Special precautions for user**
Special regulations: Non-applicable
EmS Codes:
Physico-Chemical properties: see section 9
Limited quantities: Non-applicable
Segregation group: Non-applicable
- 14.7 **Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:

E4 UNI FORTE

SECTION 14: TRANSPORT INFORMATION (continued)

14.1 UN number or ID number:	Non-applicable
14.2 UN proper shipping name:	Non-applicable
14.3 Transport hazard class(es):	Non-applicable
Labels:	Non-applicable
14.4 Packing group:	Non-applicable
14.5 Environmental hazards:	No
14.6 Special precautions for user	
Physico-Chemical properties:	see section 9
14.7 Maritime transport in bulk according to IMO instruments:	Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Regulation (EC) No 648/2004 on detergents:

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in Regulation (EC) n°648/2004 on detergents. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Labelling for contents:

Component	Concentration interval
Non-ionic surfactants, EDTA	% (w/w) < 5
perfumes	

Allergenic fragrances: 2-(4-tert-Butylbenzyl)propionaldehyde, Lysmeral technisch (BUTYLPHENYL METHYLPROPIONAL), Hexyl cinnam-aldehyde (HEXYL CINNAMAL).

Seveso III:

Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ...):

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

- Regulation (EC) No 1223/2009 of the European Parliament and of the Council of 30 November 2009 on cosmetic products
- Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents
- Commission Regulation (EC) No 907/2006 of 20 June 2006 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes III and VII
- Commission Regulation (EC) No 551/2009 of 25 June 2009 amending Regulation (EC) No 648/2004 of the European Parliament and of the Council on detergents, in order to adapt Annexes V and VI thereto (surfactant derogation)

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

- CONTINUED ON NEXT PAGE -

E4 UNI FORTE

SECTION 16: OTHER INFORMATION **

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

COMMISSION REGULATION (EU) 2020/878

COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):

- New declared substances
2-aminoethanol (141-43-5)
- Removed substances
2-aminoethanol (141-43-5)

Substances that contribute to the classification (SECTION 2):

- New declared substances
2-aminoethanol (141-43-5)
- Removed substances
sodium hydroxide (1310-73-2)
2-aminoethanol (141-43-5)

CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):

- Hazard statements
- Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H290: May be corrosive to metals.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.

Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Eye Dam. 1: H318 - Causes serious eye damage.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Met. Corr. 1: H290 - May be corrosive to metals.

Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT SE 3: H335 - May cause respiratory irritation.

Classification procedure:

Skin Corr. 1: Calculation method

Eye Dam. 1: Calculation method

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient

Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

** Changes with regards to the previous version

- CONTINUED ON NEXT PAGE -



Safety data sheet

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation

E4 UNI FORTE

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -