	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	1 di 13

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

1.1. Product identifier

Code: **TERZI20**
 Product name: **DRAGHETTO DETERGENTE VETRI Caminetti e Stufe**
 UFI: **JC00-Y09V-V00U-9TJE**

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

Identified Uses	Industrial	Professional	Consumer
detergent	-	✓	✓

Uses Advised Against

Do not use for uses other than those indicated

1.3. Details of the supplier of the safety data sheet

Name: **NEW FADOR S.r.l.**
 Full address: **via Mario Calderara, 31**
 District and Country: **25018 Montichiari (BS)**
Italia
 Tel. **+39 030961 243**
www.newfador.it

e-mail address of the competent person responsible for the Safety Data Sheet: **info@newfador.it**

1.4. Emergency telephone number

For urgent inquiries refer to: **NEW FADOR S.r.l.**
+39 030961 243
(08.30 - 17.30)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Substance or mixture corrosive to metals, category 1	H290	May be corrosive to metals.
Skin corrosion, category 1A	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.


Hazard pictograms:



Signal words: **Danger**

Hazard statements:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

	<h1>Material Safety Data Sheet</h1> <p>Conforms to Reg. (EU) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	2 di 13

Precautionary statements:

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P264	Wash your hands thoroughly after use.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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 CENTER.
P405	Store locked up.
P501	Dispose of the product / container in accordance with current regulations.

Contains: SODIUM HYDROXIDE

Ingredients according to Regulation (EC) No. 648/2004

Less than 5% anionic surfactants

perfumes

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients


3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
2-BUTOXYETHANOL CAS 111-76-2	$5 \leq x < 6$	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315 LD50 Oral: 1200 mg/kg, LD50 Dermal: 2000 mg/kg, STA Inhalation vapours: 11 mg/l
EC 203-905-0 INDEX 603-014-00-0 REACH Reg. 01-2119475108-36		
SODIUM ETASULFATE CAS 126-92-1	$2,5 \leq x < 3$	Eye Dam. 1 H318, Skin Irrit. 2 H315 Eye Dam. 1 H318: $\geq 20\%$, Eye Irrit. 2 H319: $\geq 10\%$
EC 204-812-8 INDEX - REACH Reg. 01-2119971586-23		
SODIUM HYDROXIDE CAS 1310-73-2	$2,5 \leq x < 3$	Met. Corr. 1 H290, Skin Corr. 1A H314, Eye Dam. 1 H318 Skin Corr. 1B H314: $\geq 2\%$, Skin Irrit. 2 H315: $\geq 0,5\%$, Eye Dam. 1 H318: $\geq 2\%$, Eye Irrit. 2 H319: $\geq 0,5\%$
EC 215-185-5 INDEX 011-002-00-6 REACH Reg. 01-2119457892-27		

	<h1>Material Safety Data Sheet</h1> <p>Conforms to Reg. (EU) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	3 di 13

The full wording of hazard (H) phrases is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.

INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.

INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.


Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

	<h1>Material Safety Data Sheet</h1> <p>Conforms to Reg. (EU) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	4 di 13

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well-ventilated place, away from direct sunlight. Store in a cool and well-ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany):

8A

7.3. Specific end use(s)


Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.)
CZE	Česká Republika	Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů
DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GRC	Ελλάδα	Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιογόνους παράγοντες κατά την εργασία"»
HUN	Magyarország	Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov pred rizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov
SVN	Slovenija	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Direttiva (UE) 2022/431; Direttiva (UE) 2019/1831; Direttiva (UE) 2019/130; Direttiva (UE) 2019/983;

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	5 di 13

Direttiva (UE) 2017/2398; Direttiva (UE) 2017/164; Direttiva 2009/161/UE; Direttiva 2006/15/CE; Direttiva 2004/37/CE; Direttiva 2000/39/CE; Direttiva 98/24/CE; Direttiva 91/322/CEE.
ACGIH 2021

TLV-ACGIH

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	98		246		SKIN
TLV	CZE	100		200		SKIN
AGW	DEU	49	10	196	40	SKIN
MAK	DEU	49	10	98	20	SKIN
TLV	DNK	98	20			SKIN
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
TLV	GRC	120	25			
AK	HUN	98		246		
GVI/KGVI	HRV	98	20	246	50	SKIN
VLEP	ITA	98	20	246	50	SKIN
TGG	NLD	100		246		SKIN
VLE	PRT	98	20	246	50	SKIN
NDS/NDSch	POL	98		200		
NPEL	SVK	98	20	246		SKIN
MV	SVN	98	20			SKIN
WEL	GBR	123	25	246	50	SKIN
OEL	EU	98	20	246	50	SKIN
TLV-ACGIH		97	20			

Predicted no-effect concentration - PNEC

Normal value in fresh water	8,8	mg/l
Normal value in marine water	0,88	mg/l
Normal value for fresh water sediment	34,6	mg/kg
Normal value for marine water sediment	3,46	mg/kg
Normal value for water, intermittent release	9,1	mg/l
Normal value of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	20	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		26,7 mg/kg bw/d		6,3 mg/kg bw/d				
Inhalation	147 mg/m3	426 mg/m3		59 mg/m3	246 mg/m3	1091 mg/m3		98 mg/m3
Skin		89 mg/kg bw/d		75 mg/kg bw/d				125 mg/kg bw/d

SODIUM HYDROXIDE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	2				
TLV	CZE	1		2		
TLV	DNK	2				
VLA	ESP	2				
VLEP	FRA	2				
TLV	GRC	2		2		
AK	HUN	2		2		
GVI/KGVI	HRV			2		



Material Safety Data Sheet

Conforms to Reg. (EU) 878/2020

Board Code S-P4/2-2

Board Date 05/2010

Board Rev. 1

Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	6 di 13

NDS/NDSch	POL	0,5	1
NPEL	SVK	2	
WEL	GBR		2
TLV-ACGIH			2 (C)

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			1 mg/m3				1 mg/m3	

SODIUM ETASULFATE

Predicted no-effect concentration - PNEC

Normal value in fresh water	136	mg/l
Normal value in marine water	14	mg/l
Normal value for fresh water sediment	15	mg/kg
Normal value for marine water sediment	15	mg/kg
Normal value of STP microorganisms	135	mg/l
Normal value for the terrestrial compartment	22	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				24 mg/kg bw/d				
Inhalation				85 mg/m3				285 mg/m3
Skin				2440 mg/kg bw/d				4060 mg/kg bw/d

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ;

MED = medium hazard ; HIGH = high hazard.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category III professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).

RESPIRATORY PROTECTION


If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	7 di 13

compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	Method: not specified
Colour	red	
Odour	characteristic	Method: not specified
Odour threshold	not determined	
Melting point / freezing point	not determined	
Initial boiling point	not determined	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	not available	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	13,2	Method: not provided
Kinematic viscosity	not available	
Solubility	soluble in water	Method: not specified
Partition coefficient: n-octanol/water	not available	
Vapour pressure	17,36 mmHg	
Density and/or relative density	1,025 kg/l	Method: not specified
Relative vapour density	not available	
Particle characteristics	not applicable	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Explosive properties	Not explosive	Method: not specified
Oxidising properties	No oxidizing property	Method: not specified

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

2-BUTOXYETHANOL
Decomposes under the effect of heat.

10.2. Chemical stability


The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

2-BUTOXYETHANOL
May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

10.4. Conditions to avoid

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	8 di 13

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

2-BUTOXYETHANOL

Avoid exposure to: sources of heat, naked flames.

SODIUM HYDROXIDE

Avoid exposure to: air, moisture, sources of heat.

10.5. Incompatible materials

SODIUM HYDROXIDE

Incompatible with: strong acids, ammonia, zinc, lead, aluminium, water, flammable liquids.

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

2-BUTOXYETHANOL

May develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture:	> 5 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

2-BUTOXYETHANOL

LD50 (Dermal):	2000 mg/kg Rabbit
LD50 (Oral):	1200 mg/kg Rat
LC50 (Inhalation vapours):	9000 mg/l/4h Rat
STA (Inhalation vapours):	11 mg/l estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

SODIUM HYDROXIDE

LD50 (Oral):	325 mg/kg bw
--------------	--------------

SODIUM ETASULFATE

LD50 (Dermal):	2000 mg/kg
LD50 (Oral):	2840 mg/kg

SKIN CORROSION / IRRITATION

Corrosive for the skin

Classification according to the experimental pH value

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage


RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	9 di 13

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

2-BUTOXYETHANOL

LC50 - for Fish	1250 mg/l/96h
EC50 - for Crustacea	> 1000 mg/l/48h
EC50 - for Algae / Aquatic Plants	911 mg/l/72h
Chronic NOEC for Crustacea	> 500 mg/l 48h
Chronic NOEC for Algae / Aquatic Plants	88 mg/l 72h

SODIUM ETASULFATE

LC50 - for Fish	> 100 mg/l/96h
EC50 - for Crustacea	483 mg/l/48h
EC50 - for Algae / Aquatic Plants	511 mg/l/72h
Chronic NOEC for Fish	1357 mg/l
Chronic NOEC for Crustacea	14 mg/l
Chronic NOEC for Algae / Aquatic Plants	103 mg/l


SODIUM HYDROXIDE

LC50 - for Fish	< 180 mg/l/96h <i>Gambusia affinis</i>
EC50 - for Crustacea	40,4 mg/l/48h <i>Ceriodaphnia sp.</i>

12.2. Persistence and degradability

2-BUTOXYETHANOL

Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	10 di 13

SODIUM ETASULFATE

Rapidly degradable

SODIUM HYDROXIDE

Degradability: information not available

12.3. Bioaccumulative potential

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water 0,81

12.4. Mobility in soil

SODIUM ETASULFATE

Partition coefficient: soil/water 1,88

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.

12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1719

14.2. UN proper shipping name

ADR / RID: CAUSTIC ALKALI LIQUID, N.O.S.

IMDG: CAUSTIC ALKALI LIQUID, N.O.S.


IATA: CAUSTIC ALKALI LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8



	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	11 di 13

IATA: Class: 8 Label: 8



14.4. Packing group

ADR / RID, IMDG, IATA: II

14.5. Environmental hazards

ADR / RID: NO
 IMDG: NO
 IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 1 L	Tunnel restriction code: (E)
IMDG:	Special provision: 274 EMS: F-A, S-B	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 30 L	Packaging instructions: 855
	Pass.:	Maximum quantity: 1 L	Packaging instructions: 851
	Special provision:	A3, A803	

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product
Point 3

Contained substance
Point 75


Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors
not applicable

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

	<h1 style="margin: 0;">Material Safety Data Sheet</h1> <p style="margin: 0;">Conforms to Reg. (EU) 878/2020</p>					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	12 di 13

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Regulation (EC) No. 648/2004

Ingredients according to Regulation (EC) No. 648/2004

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 1: Low hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:


Met. Corr. 1	Substance or mixture corrosive to metals, category 1
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1A	Skin corrosion, category 1A
Eye Dam. 1	Serious eye damage, category 1
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament

	Material Safety Data Sheet Conforms to Reg. (EU) 878/2020					Board Code S-P4/2-2
						Board Date 05/2010
						Board Rev. 1
Document n°	Revision date	Rev. n°	Edited by	Approved by	Filed by	Page
68/11	27.01.2023	7	RLAB	DG	RLAB	13 di 13

3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.