Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code:	**4110022380**
Product name	**STRONG BILTH WASHER**
UFI :	**PQ90-40HJ-K00W-EC71**

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

Intended use **Detergent for washing bilge rooms**

1.3. Details of the supplier of the safety data sheet

Name	**Meccanocar Italia S.r.l.**
Full address	**Via San Francesco, 22**
District and Country	**56033 Capannoli (PI)** **Italy**
	Tel. +39 0587 609433
	Fax +39 0587 607145
e-mail address of the competent person	
responsible for the Safety Data Sheet	**moreno.meini@meccanocar.it**
Supplier:	

1.4. Emergency telephone number

For urgent inquiries refer to **National Poisons Information Service: +44 121 507 4123**

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:

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:	
H314	Causes severe skin burns and eye damage.
Precautionary statements:	
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P310	Immediately call a POISON CENTER / doctor.
P264	Wash hands thoroughly after handling.
Contains:	ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM SODIUM HYDROXIDE AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES ALCOHOLS C9-11, ETHOXYLATES

2.3. Other hazards

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

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification (EC) 1272/2008 (CLP)**
ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM INDEX 607-428-00-2 EC 200-573-9 CAS 64-02-8	13,5 ≤ x < 15	Acute Tox. 4 H302, Acute Tox. 4 H332, STOT RE 2 H373, Eye Dam. 1 H318 LD50 Oral: 1780 mg/kg, STA Inhalation mists/powders: 1,5 mg/l

REACH Reg. 01-2119486762-27-XXXX		
ALCOHOLS C9-11, ETHOXYLATES		
INDEX -	4,5 ≤ x < 5	Eye Irrit. 2 H319
EC 614-482-0		
CAS 68439-46-3		
AMINE, C12-14 (EVEN NUMBER) - ALKYLDIMETHYL, N-OXIDES		
INDEX -	4,5 ≤ x < 5	Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411
EC 931-292-6		STA Oral: 500 mg/kg
CAS 308062-28-4		
REACH Reg. 01-2119490061-47-XXXX		
2-BUTOXYETHANOL		
INDEX 603-014-00-0	4,5 ≤ x < 5	Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		LD50 Oral: 615 mg/kg
CAS 111-76-2		
REACH Reg. 01-2119475108-36-XXXX		
SODIUM HYDROXIDE		
INDEX 011-002-00-6	4,5 ≤ x < 5	Skin Corr. 1A H314, Eye Dam. 1 H318
EC 215-185-5		Skin Corr. 1B H314: ≥ 2%, Skin Irrit. 2 H315: ≥ 0,5%, Eye Dam. 1 H318: ≥ 2%, Eye Irrit. 2 H319: ≥ 0,5%
CAS 1310-73-2		
REACH Reg. 01-2119457892-27-XXXX		

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 fire fighting 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.
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

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after 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 in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

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
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
LTU	Lietuva	Jsakymas dėl lietuvos higienos normos hn 23:2011 „cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai“ patvirtinimo
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
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
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2022

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		2				
TLV-ACGIH		10				INHAL
TLV-ACGIH		3				RESP

Predicted no-effect concentration - PNEC		
Normal value in fresh water	2,2	mg/l
Normal value in marine water	0,22	mg/l
Normal value for water, intermittent release	1,2	mg/l
Normal value of STP microorganisms	43	mg/l
Normal value for the terrestrial compartment	0,72	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				25 mg/kg bw/d				
Inhalation		1,2 mg/m3		0,6 mg/m3		3 mg/m3		1,5 mg/m3

SODIUM HYDROXIDE

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations

		mg/m3	ppm	mg/m3	ppm
VLA	ESP			2	
VLEP	FRA	2			
RD	LTU			2 (C)	
TLV	NOR	2			
NDS/NDSCh	POL	0,5		1	
WEL	GBR			2	
TLV-ACGIH				2 (C)	

Health - Derived no-effect level - DNEL / DMEL

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

2-BUTOXYETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	49	10	246	50	SKIN
VLEP	ITA	98	20	246	50	SKIN
RD	LTU	50	10	100	20	SKIN
TLV	NOR	50	10			SKIN
VLE	PRT	98	20	246	50	SKIN
NDS/NDSCh	POL	98		200		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 of STP microorganisms	463	mg/l
Normal value for the food chain (secondary poisoning)	0,02	mg/kg
Normal value for the terrestrial compartment	2,33	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	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			98 mg/m3
Skin		89 mg/kg/d		75 mg/kg bw/d		89 mg/kg bw/d		125 mg/kg bw/d

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,034	mg/l
Normal value in marine water	0,003	mg/l
Normal value for fresh water sediment	5,24	mg/kg
Normal value for marine water sediment	0,524	mg/kg
Normal value of STP microorganisms	24	mg/l
Normal value for the food chain (secondary poisoning)	11,1	mg/kg
Normal value for the terrestrial compartment	1,02	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				0,44 mg/kg bw/d				
Inhalation				1,53 mg/m3				6,2 mg/m3
Skin				5,5 mg/kg bw/d				11 mg/kg bw/d

ALCOHOLS C9-11, ETHOXYLATES

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,104	mg/l
Normal value in marine water	0,104	mg/l
Normal value for fresh water sediment	13,7	mg/kg
Normal value for marine water sediment	13,7	mg/kg
Normal value of STP microorganisms	1,4	mg/l
Normal value for the terrestrial compartment	1	mg/kg

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				25 mg/kg bw/d				
Inhalation				87 mg/m3				294 mg/m3
Skin				1250 mg/kg bw/d				2080 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.
The following should be considered when choosing work glove material (see standard EN 374): 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 compliance with environmental standards.

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to> 480 minutes of breakthrough time according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm).

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

The glove material has to be impermeable and resistant to the product / the substance / the
Preparation. PVC gloves

ALCOHOLS C9-11, ETHOXYLATES

Chemical resistant protective gloves (EN 374)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding> 480 minutes of permeation time
according to EN 374): nitrile rubber (NBR) - 0.4 mm coating thickness
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar
substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	liquid	

Colour	yellow
Odour	characteristic
Melting point / freezing point	not available
Initial boiling point	not available
Flammability	not available
Lower explosive limit	not available
Upper explosive limit	not available
Flash point	> 60 °C
Auto-ignition temperature	not available
Decomposition temperature	not available
pH	11,89
Kinematic viscosity	not available
Solubility	soluble in water
Partition coefficient: n-octanol/water	not available
Vapour pressure	not available
Density and/or relative density	1,12
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

Information not available

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.

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

Decomposition temperature> 150 ° C

SODIUM HYDROXIDE

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

It can corrode metals in the presence of water or moisture

SODIUM HYDROXIDE

- Emits hydrogen by reaction with metals.
- Exothermic reaction with strong acids.
- Risk of violent reaction.
- Risk of explosion.
- Reacts violently with water.

2-BUTOXYETHANOL

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

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

SODIUM HYDROXIDE

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

- Far from direct sunlight.
- To avoid thermal decomposition, do not overheat.
- Exposure to humidity.
- Freezing

2-BUTOXYETHANOL

Avoid exposure to: sources of heat,naked flames.

High temperatures and sources of ignition. Prolonged exposure with air / oxygen and light.

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

Oxidizing agents, amphoteric metals and light metals

SODIUM HYDROXIDE

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

Metals, oxidizing agents, water, acids, aluminum, other light metals and their alloys.

2-BUTOXYETHANOL

Oxidizing agents.

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

Dangerous reactions
Reacts with acids, alkalis and oxidizing agents.

ALCOHOLS C9-11, ETHOXYLATES

Acids, alkalines, caustics, halogens, reactive chemicals.

10.6. Hazardous decomposition products

2-BUTOXYETHANOL

May develop: hydrogen.

Carbon oxides.

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

SECTION 11. Toxicological information

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:	Not classified (no significant component)

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM

LD50 (Oral):	1780 mg/kg Ratto (equivalente o similare a OECD 401)

SODIUM HYDROXIDE

LD50 (Dermal):	1350 mg/kg Rat
LD50 (Oral):	1350 mg/kg Rat

2-BUTOXYETHANOL

LD50 (Dermal):	405 mg/kg Rabbit
LD50 (Oral):	615 mg/kg Rat
LC50 (Inhalation vapours):	2,2 mg/l/4h Rat

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES

STA (Oral):	500 mg/kg estimate from table 3.1.2 of Annex I of the CLP (figure used for calculation of the acute toxicity estimate of the mixture)

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: equivalent or similar to OECD 401
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: oral

Results: LD50 = 1780 mg / kg
Method: OECD 412
Reliability: 1
Species: Rat (wistar; male)
Route of exposure: inhalation (aerosol)
Results: harmful by inhalation

2-BUTOXYETHANOL
Method: OECD 401
Reliability: 1
Species: guinea pig (Hartley; male / female)
Route of exposure: Oral
Results: LD50 = 1414 mg / kg bw
Method: CFR title 49, section 173.132
Reliability: 2
Species: Guinea pig (Dunkin-Hartley; male / female)
Route of exposure: Inhalation (vapor)
Results: Not classified
Method: OECD 402
Reliability: 1
Species: guinea pig (Hartley; male / female)
Route of exposure: Dermal
Results: Not classified

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES
Method: OECD Guideline 401
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50 3 800 mg / kg bw
Method: EU Method B.3
Reliability: 2
Species: Rat (CD / Crl: CD (SD); male / female)
Route of exposure: Dermal
Results: LD50> 2 000 mg / kg bw

ALCOHOLS C9-11, ETHOXYLATES
Method: Equivalent or similar to OECD 401
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: LD50 = 3488 mg / kg bw

SKIN CORROSION / IRRITATION

Corrosive for the skin

Classification according to the experimental Ph value

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: OECD 404
Reliability: 1
Species: Rabbit (Vienna White)
Route of exposure: cutaneous
Results: not irritating

SODIUM HYDROXIDE
Method: Not indicated
Reliability: 1
Human species
Route of exposure: Dermal
Results: Irritating
Bibliographic reference: York M, Griffiths E, Whittle E and Basketter DA, Evaluation of a human patch test for the identification and classification of skin irritation potential (1996)

2-BUTOXYETHANOL
Method: EU Method B.4
Reliability: 2
Species: Rabbit (New Zealand white; male / female)
Route of exposure: Dermal
Results: Irritating
Bibliographic reference: Jacobs G, Martens M, Mosselmans G, Proposal of limit concentrations for skin irritation within the context of a new EEC directive on the classification and labeling of preparations. (1987)

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: equivalent or similar to OECD 405
Reliability: 2
Species: Rabbit (Vienna White)
Route of exposure: ocular
Results: causes serious eye damage (Harmonized classification, Annex VI, CLP Reg.)

SODIUM HYDROXIDE
Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Irritating
Bibliographic reference: Jacobs GA, OECD Eye Irritation Tests on Sodium Hydroxide (1992)

2-BUTOXYETHANOL
Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand white; male / female)
Route of exposure: Ocular
Results: Irritating

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES
Method: OECD Guideline 405
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Positive, category 1

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: OECD 406 - Read across
Reliability: 1
Species: guinea pig (Hartley; female)
Route of exposure: cutaneous
Results: non sensitizing

SODIUM HYDROXIDE
Method: According to the OECD SIDS document for sodium hydroxide
Reliability: 2
Species: Human (male)
Route of exposure: Dermal
Results: Not sensitizing
Bibliographic reference: Park et al., Journal of Dermatological Science, 10, 159-165 (1995).

2-BUTOXYETHANOL
Method: OECD 406
Reliability: 1
Species: Guinea pig (Dunkin-Hartley; male / female)
Route of exposure: Dermal
Results: Not sensitizing
Method: Equivalent or similar to OECD 474-Test in vivo
Reliability: 1
Species: Mouse (B6C3F1)
Results: Negative

Skin sensitization

ALCOHOLS C9-11, ETHOXYLATES
Method: Equivalent or similar to OECD 406
Reliability: 2
Species: guinea pig (Variety of the breeding unit 'P'; male / female)
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: equivalent or similar to 471 - In vitro test
Reliability: 2

Species: S. typhimurium, E.Coli
Results: negative with and without metabolic activation
Method: OECD 474 - in vivo test
Reliability: 1
Species: Mouse (NMRI; male)
Route of exposure: oral
Results: negative.

2-BUTOXYETHANOL
Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 1
Species: S. typhimurium TA 1535
Results: negative
Bibliographic reference:
Method: Equivalent or similar to OECD 474-Test in vivo
Reliability: 1
Species: Mouse (B6C3F1)
Results: Negative

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES
Method: OECD Guideline 487_test in vitro
Reliability: 1
Species: Human
Results: Negative
Method: Equivalent or similar to OECD Guideline 478-test in vivo
Reliability: 2
Species: mouse (C3D2F1 / J; male)
Route of exposure: Oral
Results: Negative

ALCOHOLS C9-11, ETHOXYLATES
Method: OECD 471-in vitro test-Read across
Reliability: 2
Species: S. typhimurium
Results: Negative with and without metabolic activation

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: study report (1977)
Reliability: 2
Species: Mouse (B6C3F1; male / female)
Route of exposure: oral
Results: negative. NOAEL (carcinogenicity) = 938 mg / kg bw / day

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES
Method: Equivalent or similar to OECD Guideline 451
Reliability: 1
Species: Rat (Charles River; male / female)
Route of exposure: Oral
Results: NOEL 0.2

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: Not indicated
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: oral
Results: negative. NOAEL (reproduction)> = 250 mg / kg body weight / day
Bibliographic reference: Oser, B.L. et al., Toxicology and applied pharmacology (1963)
Method: not indicated
Reliability: 2
Species: Rat (Albino)
Route of exposure: oral
Results: negative. NOAEL (development, fetus)> = 1 374 mg / kg body weight / day
Bibliographic reference: Schardein, J.L. et alb, Toxicology and Applied Pharmacology (1981)

2-BUTOXYETHANOL
Method: Not indicated
Reliability: 1
Species: Mouse (CD-1; male / female)
Route of exposure: Oral
Results: NOAEL = 720 mg / kg bw / day
Bibliographic reference: Heindel JJ, Gulati DK, Russel VS, Reel JR, Lawton AD and Lamb JC, Assessment of Ethylene Glycol Monobutyl and monophenol Ether reproductive toxicity using a continuous breeding protocol in Swiss CD-1 mice (1990).

Adverse effects on sexual function and fertility

ALCOHOLS C9-11, ETHOXYLATES
Method: Equivalent or similar to OECD 416
Reliability: 2
Species: Rat (Fischer 344; male / female)
Route of exposure: Dermal
Results: NOAEL (fertility)> = 250 mg / kg bw / day

Adverse effects on development of the offspring

ALCOHOLS C9-11, ETHOXYLATES
Method: Equivalent or similar to OECD 416
Reliability: 2
Species: Rat (Fischer 344)
Route of exposure: Dermal
Results: NOAEL (development)> = 250 mg / kg bw / day

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

SODIUM HYDROXIDE
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

2-BUTOXYETHANOL
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

AMINE, C12-14 (EVEN NUMBER) -ALKYLDIMETHYL, N-OXIDES
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ALCOHOLS C9-11, ETHOXYLATES
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Method: Not indicated-Read across
Reliability: 2
Species: Rat (Holtzman; male)
Route of exposure: Oral
Results: Negative, NOAEL> = 500 mg / kg bw / day
Bilbiographical reference: The Toxicity and Pharmacodynamics of EGTA: Oral Administration to Rats and Comparisons with EDTA, Wynn, J.E. et al (1970)
Method: OECD 413
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation (dust)
Results: Negative, NOAEC = 3 mg / m3 air

SODIUM HYDROXIDE
Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for prolonged or repeated exposure.

2-BUTOXYETHANOL
Method: Equivalent or similar to OECD 408
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Oral
Results: Negative, NOAEL <69 mg / kg bw
Method: Equivalent or similar to OECD 453

Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEC <31 ppm
Method: Equivalent or similar to OECD 411
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Dermal
Results: Negative; NOAEL> 150 mg / kg bw / day

ALCOHOLS C9-11, ETHOXYLATES
Method: Equivalent or similar to OECD 408-Read across
Reliability: 2
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: NOAEL> = 500 mg / kg bw / day

Target organs

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Respiratory tract

Route of exposure

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Inhalation

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

12.1. Toxicity

AMINE, C12-14 (EVEN NUMBER) - ALKYLDIMETHYL, N-OXIDES

LC50 - for Fish	2,67 mg/l/96h
EC50 - for Crustacea	3,1 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,143 mg/l/72h
LC10 for Fish	0,42 mg/l/96h

EC10 for Crustacea	0,7 mg/l/28d
EC10 for Algae / Aquatic Plants	0,067 mg/l/72h
Chronic NOEC for Fish	0,42 mg/l
Chronic NOEC for Crustacea	0,7 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,067 mg/l

12.2. Persistence and degradability

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Not rapidly degradable, 0-10% in 28 days (OECD 302 B)
2-BUTOXYETHANOL
Easily degradable.
ALCOHOLS C9-11, ETHOXYLATES
Easily degradable in water, 71-100% in 28 days.

2-BUTOXYETHANOL

Solubility in water	1000 - 10000 mg/l

Rapidly degradable

SODIUM HYDROXIDE

Solubility in water	> 10000 mg/l

Degradability: information not available

12.3. Bioaccumulative potential

2-BUTOXYETHANOL

Partition coefficient: n-octanol/water	0,81

12.4. Mobility in soil

Information not available

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 ≥ 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.

SODIUM HYDROXIDE
- Dilute with plenty of water.
- Solutions with a high pH value must be neutralized before discharging.
- Neutralize with acid.
- In accordance with local and national regulations.

2-BUTOXYETHANOL
Dispose of as hazardous waste. Recover or recycle if possible. Otherwise incineration. Dispose according to local regulations.

ALCOHOLS C9-11, ETHOXYLATES
They must be disposed of or incinerated in accordance with local regulations.

SECTION 14. Transport information

14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1760

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, N.O.S.
IMDG: CORROSIVE LIQUID, N.O.S.
IATA: CORROSIVE LIQUID, N.O.S.

14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8
IMDG: Class: 8 Label: 8
IATA: Class: 8 Label: 8

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80 Limited Quantities: 5 L Tunnel restriction code: (E)

	Special provision: 274		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 852
	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 ≥ 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

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.

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:

Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Corr. 1A	Skin corrosion, category 1A
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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
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
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10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
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16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
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20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
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22. Delegated Regulation (UE) 2022/692 (XVIII 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.