Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **411 00 14920-2796-5 L**
411 00 14930-2798-20 L

Product name **PREWASH SHAMPOO**

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

Intended use **Neutral shampoo for vehicle washing**

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**

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 2015/830.
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.

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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P406	Store in a corrosion-resistant/container with a resistant inner liner.
P501	Dispose of contents / container in accordance with local regulations.

Contains: 1-PROPANAMINIUM, 3-AMINO-N- (CARBOXYMETHYL) -N, N-DIMETHYL-, N- (C8-C18 AND C18-UNSATD. ACYL) DERIVS., INTERNAL SALTS
ETHYLENE DIAMINE TETRA ACETIC ACID
2-BUTOXYETHANOL

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification 1272/2008 (CLP)
1-PROPANAMINIUM, 3-AMINO-N- (CARBOXYMETHYL) -N, N- DIMETHYL-, N- (C8-C18 AND C18- UNSATD. ACYL) DERIVS., INTERNAL SALTS		
CAS 147170-44-3	18 ≤ x < 19,5	Eye Dam. 1 H318, Aquatic Chronic 3 H412
EC 604-575-4		
INDEX		
ETHYLENE DIAMINE TETRA ACETIC ACID		

CAS 60-00-4	8 ≤ x < 9	Eye Irrit. 2 H319
EC 200-449-4		
INDEX 607-429-00-8		
Reg. no. 01-2119486399-18-XXXX		
2-BUTOXYETHANOL		
CAS 111-76-2	4,5 ≤ x < 5	Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-905-0		
INDEX 603-014-00-0		
Reg. no. 01-2119475108-36-XXXX		
SODIUM HYDROXIDE		
CAS 1310-73-2	4,5 ≤ x < 5	Skin Corr. 1A H314, Eye Dam. 1 H318
EC 215-185-5		
INDEX 011-002-00-6		
Reg. no. 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 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	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 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

ETHYLENE DIAMINE TETRA ACETIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
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 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				
WEL	GBR			2		
TLV	NOR	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
WEL	GBR	123	25	246	50	SKIN
VLEP	ITA	98	20	246	50	SKIN
TLV	NOR	50	10			SKIN
VLE	PRT	98	20	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

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.

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 compliance with environmental standards.

ETHYLENE DIAMINE TETRA ACETIC ACID

Respiratory protection: respiratory protection suitable for lower concentrations or short-term effect: particle filter with medium efficiency for solid and liquid particles (eg EN 143 or 149, type P2 or FFP2)
Hand protection: chemical resistant protective gloves (EN 374)
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) and others
Eye protection: safety glasses with side shields (protective glasses) (eg EN 166)

TRIETHANOLAMINE

Chemical resistant protective gloves (EN 374)
Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to> 480 minutes of permeation time according to EN 374):
for example. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinyl chloride (0.7 mm) and others
The manufacturer's instructions for use must be observed due to the wide variety of types.
Additional note: specifications are based on tests, literature data and information from glove manufacturers or derive from similar substances by analogy. Due to many conditions (eg temperature), it should be considered that the practical use of a chemical protective glove in practice can be much shorter than the breakthrough time determined through testing.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	clear liquid
Colour	Not available
Odour	characteristic
Odour threshold	Not available
pH	13
Melting point / freezing point	0 °C
Initial boiling point	100 °C
Boiling range	100 °C
Flash point	> 100 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available

Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,050-1,150
Solubility	soluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 100 °C
Decomposition temperature	Not available
Viscosity	>30 cSt
Explosive properties	not explosive
Oxidising properties	Not available

9.2. Other information

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.

ETHYLENE DIAMINE TETRA ACETIC ACID

The acid is less stable than its salts and tends to decarboxylate at over 150°C/302°F. It is an antioxidant, aqueous suspensions react with acids to develop CO2 from carbonates and hydrogen from metals.

2-BUTOXYETHANOL

Decomposes under the effect of heat.

10.2. Chemical stability

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

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.

TRIETHANOLAMINE

Reacts with acids. Reacts with oxidizing agents. Reacts with acid chlorides. Reacts with halogenated compounds. The progress of the reaction is exothermic. Incompatible with acid chlorides and acid anhydrides.

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.

ETHYLENE DIAMINE TETRA ACETIC ACID

Avoid humidity. Avoid the formation of dust.

TRIETHANOLAMINE

Avoid extreme temperatures. See section MSDS 7 - Handling and storage.

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.

10.5. Incompatible materials

TRIETHANOLAMINE

Substances to be avoided: oxidizing agents, nitrosating agents, acids, substances that form acids.

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.

10.6. Hazardous decomposition products

ETHYLENE DIAMINE TETRA ACETIC ACID

May develop: nitric oxide.

TRIETHANOLAMINE

Hazardous decomposition products: carbon oxides, nitrogen oxides, nitrous gases.

2-BUTOXYETHANOL

May develop: hydrogen.

Carbon oxides.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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

LC50 (Inhalation) of the mixture:
Not classified (no significant component)
LD50 (Oral) of the mixture:
>2000 mg/kg
LD50 (Dermal) of the mixture:
Not classified (no significant component)

2-BUTOXYETHANOL

LD50 (Oral) 615 mg/kg Rat

LD50 (Dermal) 405 mg/kg Rabbit

LC50 (Inhalation) 2,2 mg/l/4h Rat

SODIUM HYDROXIDE

LD50 (Oral) 1350 mg/kg Rat

LD50 (Dermal) 1350 mg/kg Rat

TRIETHANOLAMINE

LD50 (Oral) 4190 mg/kg Rat

LD50 (Dermal) > 2000 mg/kg Rabbit

ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Equivalent or similar to OECD 401
Reliability: 2
Species: Rat (male / female)
Route of exposure: Oral
Results: LD50 = 4500 mg / kg bw
Method: OECD 412
Reliability: 1
Species: Rat (Wistar; male)
Route of exposure: Inhalation (aerosol)
Results: Harmful

TRIETHANOLAMINE

Method: Equivalent or similar to OECD 401
Reliability: 2
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50 = 6400 mg / kg bw
Method: Equivalent or similar to OECD 402
Reliability: 2
Species: Rabbit
Route of exposure: Dermal
Results: Not indicated

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

SKIN CORROSION / IRRITATION

Corrosive for the skin

ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Not indicated
Reliability: 2
Species: Rabbit (Vienna-White)
Route of exposure: Dermal
Results: Not irritating

TRIETHANOLAMINE

Method: OECD 404
Reliability: 1
Species: Rabbit (Vienna White)
Route of exposure: Dermal
Results: Not classified

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

ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Not indicated
Reliability: 2
Species: Rabbit (Vienna-White)
Route of exposure: Ocular
Results: Irritating

TRIETHANOLAMINE

Method: Equivalent or similar to OECD 405
Reliability: 2
Species: Rabbit (Vienna White)
Route of exposure: Ocular
Results: Not classified

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

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

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
ETHYLENE DIAMINE TETRA ACETIC ACID

Method: OECD 406-Read across
Reliability: 1
Species: guinea pig (Hartley; female)
Route of exposure: Dermal
Results: Not sensitizing

TRIETHANOLAMINE

Method: OECD 406
Reliability: 1
Species: guinea pig (Pirbright-White; female)
Route of exposure: Dermal
Results: Not classified

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Equivalent or similar to OECD 471-Read across-Test in vitro
Reliability: 2
Species: S. typhimurium, E.Coli
Results: Negative with and without metabolic activation
Method: OECD 474-Read across-Test in vivo
Reliability: 1
Species: Mouse (NMRI; male)
Route of exposure: Oral
Results: Negative

TRIETHANOLAMINE

Method: OECD 476 in vitro test
Reliability: 1
Species: Mouse lymphoma
Results: Negative with and without metabolic activation

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

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Not indicated-Read across
Reliability: 2
Species: Rat (Fischer 344; male / female)
Route of exposure: Oral
Results: NOAEL> = 500 mg / kg bw / day

TRIETHANOLAMINE

Method: Equivalent or similar to OECD 451
Reliability: 1
Species: Rat (Fischer 344; male / female)
Route of exposure: Dermal
Results: NOAEL <63 mg / kg bw / day

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

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
ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Not indicated-Read across
Reliability: 2
Species: Rat (FDRL; male / female)
Route of exposure: Oral
Results: NOAEL (fertility)> = 250 mg / kg bw / day
Bibliographic reference: Safety Evaluation Studies of Calcium EDTA, Oser, B.L. et al, (1963)

Adverse effects on development of the offspring
ETHYLENE DIAMINE TETRA ACETIC ACID

Method: Not indicated
Reliability: 2
Species: Rat (Albino)
Route of exposure: Oral
Results: NOAEL (development)> = 967 mg / kg bw / day

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

1-PROPANAMINIUM, 3-AMINO-N- (CARBOXYMETHYL) -N, N-DIMETHYL-, N- (C8-C18 AND C18-UNSATD. ACYL) DERIVS., INTERNAL SALTS

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

ETHYLENE DIAMINE TETRA ACETIC ACID

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

TRIETHANOLAMINE

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.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

1-PROPANAMINIUM, 3-AMINO-N- (CARBOXYMETHYL) -N, N-DIMETHYL-, N- (C8-C18 AND C18-UNSATD. ACYL) DERIVS., INTERNAL SALTS

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

ETHYLENE DIAMINE TETRA ACETIC ACID

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

TRIETHANOLAMINE

Method: OECD 408
Reliability: 2
Species: Rat (Cox CD; male / female)
Route of exposure: Oral
Results: NOAEL 1 000 mg / kg bw / day
Method: OECD 412
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Inhalation
Results: NOAEC 500 mg / m^3 air
Method: Equivalent or similar to OECD 411
Reliability: 2
Species: Rat (Fischer 344; male / female)
Route of exposure: Dermal
Results: NOAEL 125 mg / kg bw / day

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

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

ETHYLENE DIAMINE TETRA ACETIC ACID	
LC50 - for Fish	1000 mg/l/96h
EC10 for Algae / Aquatic Plants	29,2 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	29,2 mg/l

12.2. Persistence and degradability

2-BUTOXYETHANOL
Easily degradable.

2-BUTOXYETHANOL	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

SODIUM HYDROXIDE	
Solubility in water	> 10000 mg/l
Degradability: information not available	

ETHYLENE DIAMINE TETRA ACETIC ACID	
Solubility in water	400 mg/l
Entirely degradable	

TRIETHANOLAMINE

Solubility in water	> 1000000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

2-BUTOXYETHANOL	
Partition coefficient: n-octanol/water	0,81
ETHYLENE DIAMINE TETRA ACETIC ACID	
Partition coefficient: n-octanol/water	-3,34
BCF	1,1
TRIETHANOLAMINE	
Partition coefficient: n-octanol/water	-1,75
BCF	< 3,9

12.4. Mobility in soil

TRIETHANOLAMINE	
Partition coefficient: soil/water	1

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 greater than 0,1%.

12.6. 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.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

ETHYLENE DIAMINE TETRA ACETIC ACID
It must be discharged or incinerated in accordance with local regulations.

TRIETHANOLAMINE
Incinerate in an appropriate incineration plant, observing the regulations of the local authorities.
It is not possible to specify a waste code compliant with the European waste catalog (EWC), due to dependence on use.
The waste code in accordance with the European waste catalog (EWC) must be specified in collaboration with the agency / producer / disposal authorities.

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.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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/EC: None

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

Product
Point 3

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 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:

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
Eye Irrit. 2	Eye irritation, category 2

Skin Irrit. 2	Skin irritation, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 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 NUMBER: 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: EC Regulation 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 STEL: Short-term exposure limit
- TWA: Time-weighted average 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) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 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)
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14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
16. Regulation (EU) 2019/521 (XII 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.

Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.