Safety Data Sheet

According to Annex II to REACH - Regulation 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: **411 00 21320-6440**

Product name **FOAMING PRE-WASH DETERGENT**

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

Intended use **Alkaline detergent in foaming form for car 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**

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.
H290	May be corrosive to metals.
EUH071	Corrosive to the respiratory tract.

Precautionary statements:

P260	Do not breathe mist.
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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Contains: SODIUM HYDROXIDE
ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS

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 CAS 64-02-8 EC 200-573-9 INDEX 607-428-00-2 REACH Reg. 01-2119486762-27-XXXX	8 ≤ x < 9	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
SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS		

CAS 68439-57-6 EC 931-534-0 INDEX - REACH Reg. 01-2119513401-57-XXXX	6 ≤ x < 7	Eye Dam. 1 H318, Skin Irrit. 2 H315
SODIUM HYDROXIDE		
CAS 1310-73-2 EC 215-185-5 INDEX 011-002-00-6 REACH Reg. 01-2119457892-27-XXXX	4,5 ≤ x < 5	Skin Corr. 1A H314, Eye Dam. 1 H318 Skin Corr. 1B H314: ≥ 2%, Skin Irrit. 2 H315: ≥ 0,5%, Eye Dam. 1 H318: ≥ 2%, Eye Irrit. 2 H319: ≥ 0,5%
ISOBUTYL ALCOHOL		
CAS 78-83-1 EC 201-148-0 INDEX 603-108-00-1 REACH Reg. 01-2119484609-23-XXXX	2,5 ≤ x < 3	Flam. Liq. 3 H226, Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335, STOT SE 3 H336

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
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
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	ACGIH 2020

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,024	mg/l
Normal value in marine water	0,002	mg/l
Normal value for fresh water sediment	0,767	mg/kg
Normal value for marine water sediment	0,077	mg/kg
Normal value of STP microorganisms	4	mg/l
Normal value for the terrestrial compartment	1,21	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				12,95 mg/kg bw/d				
Inhalation				45,04 mg/m3				152,22 mg/m3
Skin				1295 mg/kg bw/d				2158,33 mg/kg bw/d

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				
TLV	NOR	2				
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

ISOBUTYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	154	50			
VLEP	FRA	150	50			
TLV	NOR	75	25			SKIN
WEL	GBR	154	50	231	75	
TLV-ACGIH		152	50			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,4	mg/l
Normal value in marine water	0,04	mg/l
Normal value for fresh water sediment	1,56	mg/kg
Normal value for marine water sediment	0,156	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,076	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
Inhalation			55 mg/m3				310 mg/m3	

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.

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).

ISOBUTYL ALCOHOL

Suitable safety gloves resistant to chemicals (EN 374) also with prolonged direct contact (Recommended: protection index 6, corresponding to> 480 minutes of breakthrough time according to EN 374): Eg nitrile rubber (0.4 mm), chloroprene rubber (0.5mm), butyl rubber (0.7mm) etc.
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

Properties	Value	Information
Appearance	liquid	
Colour	pink	
Odour	pungent	
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	Remark:Non infiammabile
pH	13,5	
Kinematic viscosity	Not available	
Solubility	soluble in water	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	1,11	
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.

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

The vapours may also form explosive mixtures with the air.

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.

ISOBUTYL ALCOHOL

Reacts with strong oxidizing agents

10.4. Conditions to avoid

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

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

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.

ISOBUTYL ALCOHOL

Strong oxidizing agents

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.

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

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: OECD Guideline 401
Affidabilità: 1
Specie: Ratto (Wistar; maschio/femmina)
Via d'esposizione: Orale
Risultati: LD50 2 310 mg/kg bw
Metodo: Equivalente o similare a OECD Guideline 403
Affidabilità: 2
Specie: Ratto
Via d'esposizione: Inalazione (aerosol)
Risultati: LC50 > 52 mg/L air
Metodo: Equivalente o similare a OECD Guideline 402
Affidabilità: 2
Specie: Coniglio
Via d'esposizione: Cutanea
Risultati: LD50 6 300 mg/kg bw

ISOBUTYL ALCOHOL
Method: OECD 401
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: LD50> 2830 mg / kg bw
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Inhalation
Results: LD50> 2000 mg / kg bw
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Dermal
Results: LD50> 2000 mg / kg bw

SKIN CORROSION / IRRITATION

Corrosive for the skin

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: OECD Guideline 404
Affidabilità: 2
Specie: Coniglio (New Zealand White)

Via d'esposizione: Cutanea
Risultati: Irritante

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)

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.)

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: OECD Guideline 405
Affidabilità: 1
Specie: Coniglio (New Zealand White)
Via d'esposizione: Oculare
Risultati: Corrosivo

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)

ISOBUTYL ALCOHOL
Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Corrosive

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).

ISOBUTYL ALCOHOL
Method: QSAR
Reliability: 1
Species: Not indicated
Route of exposure: Dermal
Results: Not classified

Respiratory sensitization

Information not available

Skin sensitization

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: Equivalente o similare a OECD Guideline 406
Affidabilità: 1
Specie: Porcellini d`india (Dunkin-Hartley; femmina)
Via d'esposizione: Cutanea
Risultati: Non sensibilizzante

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.

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: OECD Guideline 471-test in vitro
Affidabilità: 1
Specie: S. typhimurium
Risultati: Negativa con o senza attivazione metabolica

ISOBUTYL ALCOHOL
Method: Not indicated - in vitro test
Reliability: 2
Species: Chinese hamster
Results: Negative with and without metabolic activation
Bibliographic reference: Evaluation of the genotoxic potential of some microbial volatile organic compounds (MVOC) with the comet assay, the micronucleus assay and the HPRT gene mutation assay, Kreja L, Seidel H-J (2002)
Method: OECD 474-test in vivo
Reliability: 1
Species: Mouse (NMRI; male / female)
Route of exposure: Oral
Results: Negative

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: Non indicato
Affidabilità: 2
Specie: Ratto (CFY; maschio)
Via d'esposizione: Orale
Risultati: NOAEL >= 195 mg/kg bw/day
Riferimento bibliografico: Hunter, B. and Benson, H.G., Long-term toxicity of the surfactant alpha-olefin sulphonate (AOS) in the rat. (1976)

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)

Adverse effects on sexual function and fertility

ISOBUTYL ALCOHOL
Method: EPA OPPTS 870.3800
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEL (fertility)> = 7.5 mg / L air

Adverse effects on development of the offspring

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: Equivalente o similare a OECD Guideline 414
Affidabilità: 2
Specie: Topo (CD-1)
Via d'esposizione: Orale
Risultati: NOAEL 2 mg/kg bw/day

ISOBUTYL ALCOHOL
Method: OECD 414
Reliability: 1
Species: Rat (Wistar)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEL (development) = 10 mg / L air

Effects on or via lactation

Information not available

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.

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
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.

ISOBUTYL ALCOHOL
Based on available data and through expert judgment, the substance is classified in the target organ toxicity class for single exposure.

Target organ

ISOBUTYL ALCOHOL
Respiratory tract

Route of exposure

Information not available

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodo: Non indicato
Affidabilità: 2
Specie: Ratto (CFY; maschio)
Via d'esposizione: Orale
Risultati: NOAEL 96 mg/kg bw/day
Riferimento bibliografico: Hunter, B. and Benson, H.G., Long-term toxicity of the surfactant alpha-olefin sulphonate (AOS) in the rat. (1976)

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.

ISOBUTYL ALCOHOL
Method: OECD 408
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: Negative, NOAEL> 1450 mg / kg bw / day
Method: EPA OPPTS 870.3800
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: Negative, NOAEL = 7.5 mg / L air

Target organ

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

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS

LC50 - for Fish	4,2 mg/l/96h
EC50 - for Algae / Aquatic Plants	1,97 mg/l/72h
EC10 for Algae / Aquatic Plants	1,2 mg/l/72h

Chronic NOEC for Algae / Aquatic Plants	1,2 mg/l

12.2. Persistence and degradability

ETHYLENDIAMMINOTETRAACETATE OF TETRASODIUM
Not rapidly degradable, 0-10% in 28 days (OECD 302 B)
SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Rapidamente biodegradabile, 80% in 28 giorni.
ISOBUTYL ALCOHOL
Easily degradable in water, 70-80% in 28 days.

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

ISOBUTYL ALCOHOL	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

12.3. Bioaccumulative potential

ISOBUTYL ALCOHOL	
Partition coefficient: n-octanol/water	1

12.4. Mobility in soil

ISOBUTYL ALCOHOL	
Partition coefficient: soil/water	0,31

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.

SULPHONIC ACIDS, C14-16 (EVEN NUMBER) -ALKANO HYDROXY AND C14-16 (EVEN NUMBER) -ALCENE, SODIUM SALTS
Metodi di smaltimento:
La generazione di rifiuti dovrebbe essere evitata o minimizzata ove possibile. Vuoto
i contenitori o le fodere possono trattenere alcuni residui di prodotto. Questo materiale e i suoi
il contenitore deve essere smaltito in modo sicuro. Quantità significative di prodotto di scarto
i residui non devono essere smaltiti attraverso le fognature ma trattati in modo adeguato
impianto di trattamento degli effluenti. Smaltire i prodotti in eccesso e non riciclabili tramite a
appaltatore autorizzato allo smaltimento dei rifiuti. Smaltimento di questo prodotto, soluzioni ed eventuali sottoprodotti
dovrebbe sempre rispettare i requisiti ambientali
legislazione sulla protezione e sullo smaltimento dei rifiuti e qualsiasi autorità locale regionale
requisiti. Evitare la dispersione del materiale versato e il deflusso e il contatto con il suolo,
corsi d'acqua, scarichi e fognature.

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.

ISOBUTYL ALCOHOL
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: 1824

14.2. UN proper shipping name

ADR / RID:	SODIUM HYDROXIDE SOLUTION
IMDG:	SODIUM HYDROXIDE SOLUTION
IATA:	SODIUM HYDROXIDE SOLUTION

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: 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)
	Special provision: -		
IMDG:	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 - 40

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:

Flam. Liq. 3	Flammable liquid, category 3
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
STOT SE 3	Specific target organ toxicity - single exposure, category 3
H226	Flammable liquid and vapour.
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.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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
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.