

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 1/10



etolit Multi-Sol

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

* 1.1. Product identifier

Trade name/designation:

etolit Multi-Sol

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

Use of the substance/mixture:

Washing and cleaning products

Relevant identified uses:

Life cycle stage [LCS]

PW: Widespread use by professional workers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

etol Eberhard Tripp GmbH

Labor

Allerheiligenstr. 12

77728 Oppenau

Germany

Telephone: +49(0)7804/41-0

Telefax: +49(0)7804/41-168

E-mail: info@etol.de

Website: www.etol.de

E-mail (competent person): wolfgang.gauss@etol.de

1.4. Emergency telephone number

Wolfgang Gauss, +49(0)7804/41-167 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (<i>Met. Corr. 1</i>)	H290: May be corrosive to metals.	On basis of test data.
Skin corrosion/irritation (<i>Skin Corr. 1</i>)	H314: Causes severe skin burns and eye damage.	Calculation method.
Serious eye damage/eye irritation (<i>Eye Dam. 1</i>)	H318: Causes serious eye damage.	Calculation method.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS05
Corrosion

Signal word: Danger

Hazard components for labelling:

sodium hydroxide; Alkyl amidopropyl betaine

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 2/10



etolit Multi-Sol

Hazard statements for physical hazards

H290 May be corrosive to metals.

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

Supplemental hazard information: -

Precautionary statements Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing and eye/face protection.

Precautionary statements Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/....

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 1310-73-2 EC No.: 215-185-5 Index No.: 011-002-00-6 REACH No.: 01-2119457892-27-0035	sodium hydroxide Skin Corr. 1A ☠ Danger H314 Specific concentration limit (SCL): Skin Corr. 1A; H314: $C \geq 5\%$ Skin Corr. 1B; H314: $2\% \leq C < 5\%$ Skin Irrit. 2; H315: $0.5\% \leq C < 2\%$ Eye Dam. 1; H318: $C \geq 2\%$ Eye Irrit. 2; H319: $0.5\% \leq C < 2\%$	2 - 20 weight-%
REACH No.: 01-2119488533-30	Alkyl amidopropyl betaine Aquatic Chronic 3, Eye Dam. 1 ☠ Danger H318-H412	< 5 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. Get immediate medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 3/10



etolit Multi-Sol

Following ingestion:

Rinse mouth. Let water be drunk in little sips (dilution effect). Get medical advice/attention if you feel unwell. Rinse mouth immediately and drink plenty of water-. Do NOT induce vomiting. Get immediate medical advice/attention.

Self-protection of the first aider:

Use personal protection equipment.

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

Skin corrosion/irritation Serious eye damage/eye irritation

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Water

Extinguishing powder

Carbon dioxide (CO₂)

Unsuitable extinguishing media:

Strong water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

Nitrogen oxides (NO_x)

Carbon dioxide (CO₂)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water-.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

* 6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Water

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 4/10



etolit Multi-Sol

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8).

Fire prevent measures:

No special measures are necessary.

Measures to prevent aerosol and dust generation:

Use only in well-ventilated areas.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed.

Storage class (TRGS 510, Germany): 8B - Non-combustible corrosive substances

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
TRGS 900 (DE)	2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	① 1 mg/m ³ ② 1 mg/m ³ ⑤ (einatembare Fraktion)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	1 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	1 mg/m ³	① DNEL worker ② Long-term - inhalation, local effects
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	7.5 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	0.14 mg/cm ²	① DNEL worker ② Long-term - dermal, local effects
Alkyl amidopropyl betaine	44 mg/m ³	① DNEL worker ② Long-term - inhalation, systemic effects

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 5/10



etolit Multi-Sol

Substance name	DNEL value	① DNEL type ② Exposure route
Alkyl amidopropyl betaine	12.5 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	0.32 mg/l	① PNEC aquatic, freshwater
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	0.032 mg/l	① PNEC aquatic, marine water
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	10 mg/l	① PNEC sewage treatment plant
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	1.7 mg/kg	① PNEC sediment, freshwater
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	0.17 mg/kg	① PNEC sediment, marine water
2,2',2''-nitrilotriethanol CAS No.: 102-71-6 EC No.: 203-049-8	0.151 mg/kg	① PNEC soil
Alkyl amidopropyl betaine	0.0135 mg/l	① PNEC aquatic, freshwater
Alkyl amidopropyl betaine	0.00135 mg/l	① PNEC aquatic, marine water
Alkyl amidopropyl betaine	3,000 mg/l	① PNEC sewage treatment plant

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment



Eye/face protection:

Eye glasses with side protection DIN EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: NBR (Nitrile rubber) >0,3mm
Breakthrough time: 480min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: colourless

Odour: Amines

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 6/10



etolit Multi-Sol

Safety relevant basis data

parameter		at °C	Method	Remark
pH	14	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature	<i>not determined</i>			
Flash point	<i>not applicable</i>			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not applicable</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	= 1.1 g/cm ³	20 °C		
Relative density	<i>not determined</i>			
Bulk density	<i>not determined</i>			
Water solubility	completely miscible	20 °C		
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>	40 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be corrosive to metals.
The product itself does not burn.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Slowly corrodes aluminium and zinc under hydrogen evolution.

* 10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials

Acid
Light metals

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

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

Substance name	Toxicological information
Alkyl amidopropyl betaine	LD₅₀ oral: >8,000 mg/kg (Rat) LC₅₀ Acute inhalation toxicity (vapour): >20 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 7/10



etolit Multi-Sol

Acute oral toxicity:

Based on available data, the classification criteria are not met.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Causes severe burns.

Serious eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

Based on available data, the classification criteria are not met.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

Additional information:

No data available

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

Substance name	Toxicological information
sodium hydroxide CAS No.: 1310-73-2 EC No.: 215-185-5	LC₅₀ : >133 - <189 mg/l 2 d (fish-, <i>Leuciscus idus</i> (gold en orfe)) EC₅₀ : >100 mg/l 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea))
Alkyl amidopropyl betaine	LC₅₀ : =1.11 mg/l 4 d (fish-) EC₅₀ : =6.5 mg/l 2 d (crustaceans, <i>Daphnia magna</i> (Big water flea)) NOEC : =0.32 mg/l 21 d (crustaceans, <i>Daphnia magna</i> (Big water flea)) EC₅₀ : =1.5 mg/l 3 d (Algae/water plant, <i>Desmodesmus subspicatus</i>)

12.2. Persistence and degradability

Substance name	Biodegradation	Remark
Alkyl amidopropyl betaine	Yes, rapidly	

12.3. Bioaccumulative potential

Substance name	Log K _{ow}	Bioconcentration factor (BCF)
sodium hydroxide CAS No.: 1310-73-2	-3.88	

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 8/10



etolit Multi-Sol

Substance name	Log K _{ow}	Bioconcentration factor (BCF)
EC No.: 215-185-5		

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

20 01 29 * Detergents containing hazardous substances

*: Evidence for disposal must be provided.

Waste code packaging:

15 01 10 * packaging containing residues of or contaminated by dangerous substances

*: Evidence for disposal must be provided.

Waste treatment options





Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Recycle sales packaging via DSD (Duales System Deutschland).

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1824	UN 1824	UN 1824	UN 1824
14.2. UN proper shipping name			
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
No	No	No	No

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 9/10



etolit Multi-Sol

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.6. Special precautions for user			
Special provisions: Limited quantity (LQ): 5l Excepted Quantities (EQ): E1 Hazard identification number (Kemler No.): 80 Classification code-: C5 tunnel restriction code-: (E) Remark:	Special provisions: Limited quantity (LQ): 5l Excepted Quantities (EQ): E1 Classification code-: C5 Remark:	Special provisions: 223 Limited quantity (LQ): 5l Excepted Quantities (EQ): E1 EmS-No.: F-A, S-B Remark:	Special provisions: Excepted Quantities (EQ): Remark:

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.

Volatile organic compounds (VOC) content in percent by weight: 0%

Regulation (EC) No. 648/2004 (Detergents regulation) :

<5% amphoteric surfactants

15.1.2. National regulations

[DE] National regulations

Störfallverordnung

for substances contained in the product:

This product is not assigned to a hazard category.

Water hazard class

WGK:

1 - schwach wassergefährdend

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1. Indication of changes

1.1.	Product identifier
1.2.	Relevant identified uses of the substance or mixture and uses advised against
6.3.	Methods and material for containment and cleaning up
10.4.	Conditions to avoid
14.6.	Special precautions for user

16.2. Abbreviations and acronyms

No data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 10 May 2021

Print date: 11 May 2021

Version: 9

Page 10/10



etolit Multi-Sol

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (<i>Met. Corr. 1</i>)	H290: May be corrosive to metals.	On basis of test data.
Skin corrosion/irritation (<i>Skin Corr. 1</i>)	H314: Causes severe skin burns and eye damage.	Calculation method.
Serious eye damage/eye irritation (<i>Eye Dam. 1</i>)	H318: Causes serious eye damage.	Calculation method.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

No data available

* Data changed compared with the previous version