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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 1/9



etolit Des

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

1.1. Product identifier

Trade name/designation:

etolit Des

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 pro- cedure
Skin corrosion/irritation (Skin Corr. 1)	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	
Hazardous to the aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	

2.2. Label elements

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



GHS05 Corrosion **GHS09** Environment

Signal word: Danger

Hazard components for labelling:

sodium hypochlorite solution

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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 2/9



etolit Des

H314 Causes severe skin burns and eye damage.	

Hazard statements for environmental hazards	
H400	Very toxic to aquatic life.

Supplemental hazard information	
EUH031	Contact with acids liberates toxic gas.

Precautionary statements Prevention	
P280	Wear protective gloves/protective clothing/eye protection/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]	Concen- tration
CAS No.: 7681-52-9 EC No.: 231-668-3 REACH No.: 01-2119488154-34	sodium hypochlorite solution Aquatic Acute 1, Aquatic Chronic 1, Eye Dam. 1, Skin Corr. 1B Danger H314-H410-EUH031 M-factor (acute): 10 M-factor (chronic): 1	5 – 10 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.

Following ingestion:

Rinse mouth. Let water be drunken 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.

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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 3/9



etolit Des

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:

In case of fire: Chlorine (Cl2) Hydrogen chloride (HCl)

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

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).

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

Revision date: 30 Nov 2020 **Print date:** 30 Nov 2020

Version: 7 Page 4/9



etolit Des

Fire prevent measures:

No special measures are necessary.

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:

Container should not be closed gas-tight.

Keep cool. Protect from sunlight.

Requirements for storage rooms and vessels:

Keep/Store only in original container. Container should not be closed gas-tight.

Storage class: 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

No data available

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 hypochlorite solution	1.55 mg/m ³	① DNEL worker
CAS No.: 7681-52-9		② Long-term – inhalation, systemic effects
sodium hypochlorite solution	3.1 mg/m ³	① DNEL worker
CAS No.: 7681-52-9		② Acute - inhalation, systemic effects
sodium hypochlorite solution	1.55 mg/m ³	① DNEL worker
CAS No.: 7681-52-9		② Long-term – inhalation, local effects
sodium hypochlorite solution	3.1 mg/m ³	① DNEL worker
CAS No.: 7681-52-9		② Acute - inhalation, local effects

Substance name	PNEC Value	① PNEC type
sodium hypochlorite solution CAS No.: 7681-52-9	0.21 μg/l	① PNEC aquatic, freshwater
sodium hypochlorite solution CAS No.: 7681-52-9	0.042 μg/l	① PNEC aquatic, marine water
sodium hypochlorite solution CAS No.: 7681-52-9	0.03 mg/l	① PNEC sewage treatment plant
sodium hypochlorite solution CAS No.: 7681-52-9	11.1 mg/kg	① PNEC secondary poisoning

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment







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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 5/9



etolit Des

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) >0,2mm 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: yellow

Odour: Chlorine

Safety relevant basis data

parameter		at °C	Method	Remark
рН	12	20 °C		
Melting point	not determined			
Freezing point	not determined			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature	not determined			
Flash point	not applicable			
Evaporation rate	not determined			
Auto-ignition temperature	not determined			
Upper/lower flammability or explosive limits	not determined			
Vapour pressure	not determined			
Vapour density	not determined			
Density	= 1.1 g/cm ³	20 °C		
Bulk density	not determined			
Water solubility	completely miscible	20 °C		
Partition coefficient: n-octanol/ water	not determined			
Dynamic viscosity	not determined			
Kinematic viscosity	not determined	40 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Contact with acids liberates toxic gas. 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

Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Protect from sunlight. Store in a well-ventilated place.

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

Revision date: 30 Nov 2020 **Print date:** 30 Nov 2020

Version: 7 Page 6/9



etolit Des

10.5. Incompatible materials

Exothermic reaction with: Acid

Light metals Copper alloys Heavy metals

10.6. Hazardous decomposition products

Chlorine Oxygen

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
7681-52-9	sodium hypochlorite solution	LD ₅₀ oral:
		=1,100 mg/kg (Rat)
		LD ₅₀ dermal:
		>20,000 mg/kg (Rabbit)
		LC ₅₀ Acute inhalation toxicity (vapour):
		>10.5 mg/l (Rabbit)

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

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
7681-52-9	sodium hypochlorite solution	LC₅₀: =0.06 mg/l 4 d (fish-)
		NOEC: =0.04 mg/l 12 d (fish-)

Aquatic toxicity:

Very toxic to aquatic life.

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

Revision date: 30 Nov 2020 **Print date:** 30 Nov 2020

Version: 7 Page 7/9



etolit Des

12.2. Persistence and degradability

CAS No.	Substance name	Biodegradation	Remark
7681-52-9	sodium hypochlorite solution	not applicable	

12.3. Bioaccumulative potential

CAS No.	Substance name	Log K _{OW}	Bioconcentration factor (BCF)
7681-52-9	sodium hypochlorite solution	-3.42	

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. 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	S
---	---

^{*:} 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:

Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN-No.			
UN 1791	UN 1791	UN 1791	UN 1791
14.2. UN proper shi	pping name		
HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION	HYPOCHLORITE SOLUTION
14.3. Transport haz	ard class(es)		
8	8	8	8
14.4. Packing group			
III	III	III	III

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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 8/9



etolit Des

RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.5. Environmental hazards			
¥ <u>z</u>	¥ <u>z</u> >	¥ <u>z</u> >	¥ ₂ >
		MARINE POLLUTANT	
14.6. Special preca	utions for user		
Special provisions: 521	Special provisions: 521	Special provisions: Limited quantity	Special provisions: Excepted Quantities
Limited quantity (LQ): 5 L	Limited quantity (LQ): 5 L	(LQ): 5 L Excepted Quantities	(EQ): Remark:
Excepted Quantities (EQ): E1	Excepted Quantities (EQ): E1	(EQ): E1 EmS-No.: F-A, S-B	
Hazard identification number (Kemler	Classification code-: C5	Remark:	
No.): 80	Remark:		
Classification code-: C5			
tunnel restriction code-: (E)			
Remark:			

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

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], Hazard categories:

ullet E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

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

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

5-15% chlorine-based bleaching agents

15.1.2. National regulations

[DE] National regulations

Störfallverordnung

for substances contained in the product:

Hazard categories:

• E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Named dangerous substances:

• Mixtures of sodium hypochlorite, aquatic acute 1 and < 5% active chlorine

Water hazard class

WGK:

2 - deutlich wassergefährdend

15.2. Chemical Safety Assessment

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

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

Revision date: 30 Nov 2020 Print date: 30 Nov 2020

Version: 7 Page 9/9



etolit Des

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	
14.6.	Special precautions for user	
15.1.	5.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	

16.2. Abbreviations and acronyms

No data available

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 pro- cedure
Skin corrosion/irritation (Skin Corr. 1)	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation (Eye Dam. 1)	H318: Causes serious eye damage.	
Hazardous to the aquatic environment (Aquatic Acute 1)	H400: Very toxic to aquatic life.	

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

Hazard statements	
H314	Causes severe skin burns and eye damage.
H410	Very toxic to aquatic life with long lasting effects.

Supplemental hazard information	
EUH031	Contact with acids liberates toxic gas.

16.6. Training advice

No data available

16.7. Additional information

No data available

^{*} Data changed compared with the previous version