

## Section 1 Identification of the substance/mixture and the company

- 1.1 Product identifier **HydroSan®**
- 1.2 Relevant identifies uses of the substance or the mixture and uses advised against.  
Identified use of substance Flocculant and flocculation aid
- 1.3 Supplier TCDO Produktionsgesellschaft mbH  
Carola-Blome-Str. 7  
A-5020 Salzburg  
Tel: +43 662 434342-0  
Fax: +43 662 434342-3
- Contact Mr. G. Weiss  
Email: [office@wapotec.at](mailto:office@wapotec.at)
- 1.4 Emergency phone +43 662 43 43 42-0  
Office hours: MO - TH: 8.00 - 16.00, FR: 8.00 - 12.00
- Toxicity information centre Vienna:**  
Phone: +43 1 406 43 43  
Available: 0-24h



## Section 2 Hazards identification

- 2.1 Hazard classification of substance or mixture  
according to Directive (EC) N° 1272/2008

**Corrosive to metals category 1**  
**Serious eye irritation cat. 2**  
**Skin irritation cat. 2**

H290 May be corrosive to metals.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

- 2.2 Identification labeling  
according to Directive (EC) 1272/2008



### Warning

H290 May be corrosive to metals.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
P101 If medical advice is needed, have product container or label at hand.

P102	Keep out of the reach of children.
P280	Wear protective gloves/ eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P501	Apply contents/container to the hazardous waste collection.

☉ Danger defining components for labeling

Sodium hydroxide (CAS: 1310-73-2)

2.3 Other hazards

Not known.

### Section 3 Composition/information on ingredients

3.2 Mixtures

☉ Chemical characteristics

Alkaline solution of salt clays (siliceous aluminate CAS-No. 12068-56-3)

☉ Dangerous ingredients

Name	CAS # / EC # / Index #	Conc. %	Classification according to Regulation (EC) 1272/2008*	
Sodium hydroxide**	1310-73-2 / 215-185-5 / 011-002-00-6	0,5 - 2	Met. Corr. 1 Skin Corr. 1A	H290 H314

\* For the wording of H-Phrases and danger classification see section 16.

\*\* Please note the workplace-related monitored limit value for the substance (see section 8).

### Section 4 First-aid measures

4.1 Description of first-aid measures

Remove immediately all contaminated clothing.  
Consult physician if disturbances occur.  
No serving in case of unconsciousness or cramps.

☉ After inhalation

Supply fresh air. Consult physician if disturbances occur.  
In case of unconsciousness place and transport in stable sideways position.

☉ After skin contact

After skin contact, wash with plenty of water and soap.  
Remove immediately all contaminated clothing.

Consult physician if disturbances occur.

☉ After eye contact

After eye contact, rinse eye immediately for 10 to 15 minutes with water holding eye lids apart. Consult a doctor upon eye irritation.

☉ After ingestion

Rinse mouth with water. If victim is conscious: Give water. Consult a doctor.

4.2 Most important symptoms and effects, acute and delayed

No further data available.

4.3 Indications for immediate medical attention or special treatment needed

Depending on patient's condition, symptoms and general condition should be evaluated by a doctor.



## Section 5 Fire-fighting measures

5.1 Extinguishing media

☉ Suitable extinguishing media

Product itself is non flammable. Adapt extinguishing media to environment.

☉ Unsuitable extinguishing media for safety reasons

None.

5.2 Special hazards arising from the substance or mixture

Fire may release following gases: CO<sub>x</sub>

5.3 Special protective actions for fire-fighters

Special protective equipment:

Wear self-contained breathing apparatus and full protective clothing.



## Section 6 Accidental release of material

6.1 Personal precautions, protective equipment and suitable emergency procedures.

Restricted access to affected area during cleaning.

Wear full protective clothing.

Ensure sufficient ventilation. Avoid contact to substance. Avoid inhaling dust/aerosols.

6.2 Environmental precautions

Do not empty undiluted into drains/surface water/ground water.

6.3 Methods and material for retention and cleaning up.

Bind with absorbent material (sand, diatomaceous earth, universal binders, sawdust)

Dispose contaminated material as waste in proper container according to section 13.

6.4 Reference to other sections

Protective measures see section 8

Disposal see section 13

## Section 7 Handling and storage

- 7.1 Precautions for safe handling  
Ensure adequate ventilation. Avoid contact with eyes and skin. Keep containers tightly closed. Wear protective clothing. Keep eye rinsing flasks ready near the workplace. Comply with legal protection and safety instructions.
- 7.2 Conditions for safe storage including any incompatibilities
- ☉ Fire and explosion protection measures  
No special measures required. Do not smoke.
  - ☉ Requirements for storage rooms and container  
No special requirements for storage rooms.  
Do not store with acids, metals and light metals.
  - ☉ Material incompatibility  
Do not use aluminum-, tin or zinc container.
  - ☉ Recommended storage temperature +5°C to +35°C, protect from sun
  - ☉ VbF class Not applicable.
- 7.3 Specific end uses  
Flocculant and flocculation aid.

## Section 8 Exposure controls/personal protection

- 8.1 Control parameters

### MAK-Values (valid for A according GKV 2018 Annex 1)

			TMW / KZW*		Exposure period
Name	CAS#		[ppm]	[mg/m <sup>3</sup> ]	[min]
Sodium hydroxide	1310-73-2	MAK	---/---	2 E / 4 E	8x5 (Mow)

*TMW	Tagesmittelwert (daily mean value)	KZW	Kurzzeitwert (Short term value)
E	Einatembare Fraktion (Respirable fraction)	Mow	Momentanwert (Momentary value)
A	Alveolengängige Fraktion (Alveolar fraction)	Miw	Mittelwert (mean value)

### Occupational Exposure Limits (valid for D according to TRGS 900 Jan. 2006) - last modified 2018

Contains no relevant quantities of ingredients with workplace-related limits to be monitored.

DNEL value (Derived exposure level without impairment)

Name		
Sodium hydroxide		
Employee		
Long-term exposure - systemic effects	Breathe in	1 mg/m <sup>3</sup>
Long-term exposure - local effects	Breathe in	1 mg/m <sup>3</sup>

### PNEC-values

No data available.

## 8.2 Limitation and monitoring of exposure

### General protective and hygiene measures

Follow usual precautions when dealing with chemicals.

Keep away from food and drinks.

Do not eat or drink at work, wash hands before breaks and at end of work.

Avoid eye and skin contact.

Avoid inhaling of steam/aerosols. Change contaminated work wear and clean it before reuse. Preventive skin protection.

Protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

### Respiratory protection

When limit values are exceeded, breathing protection is required.

### Hand protection

Protective gloves (nitrile rubber) required.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Choose glove material in consideration of the respective break through times, permeation rates and degradation.

### Eye protection

Safety goggles.

### Personal protection

Appropriate protective clothing. Personal protection should be selected specifically depending on the concentration respectively the quantity of the used mixture.

### Environmental exposure controls

Do not allow undiluted to be released into drains/groundwater/surface water.



## Section 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties.

Appearance	Liquid
Colour	Colourless
Odour	Odourless
Odour threshold	No data available.
pH	Appr. 12
Melting point	-6 °C
Boiling point / boiling range	Appr. 102 °C
Flash point	Not applicable
Evaporation rate	No data available.
Flammability	No data available.
Upper explosion limit	No data available.
Lower explosion limit	No data available.
Vapour pressure (50 °C)	Appr. 5 mbar
Density (20 °C)	1,03 g/cm <sup>3</sup>
Water solubility (20 °C)	Soluble, miscible as required
Partition coefficient; n-octanol-water	No data available.
Auto ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity (20 °C)	1,1 mPas
Explosive properties	The product is none-explosive
Oxidizing properties	No data available.

9.2 Other data  
None.



## Section 10 Stability and reactivity

- 10.1 Reactivity  
There are expected no hazardous reactions for intended use.
- 10.2 Chemical stability  
No decomposition when using according to intended purpose.
- 10.3 Possibility of hazardous reactions  
Explosive reactions possible with: metals, light metals: Hydrogen can be produced (danger of explosion!)  
Violent reactions possible with: acids
- 10.4 Conditions to avoid

Extreme temperatures have to be avoided.

10.5

Incompatible materials

Avoid contact with metals, light metals and acids.

10.6

Hazardous decomposition products.

No decomposition when using according to regulations.




## Section 11 Toxicological information

11.1

Information on toxicological effects

LD<sub>50</sub>(rat) higher than 20 ml/kg

 LD<sub>50</sub> values relevant for classification of individual components (literature value)

No data available.

 Acute toxicity

Based on available data the classification criteria are not met.

 Corrosive/irritant to skin

Category 2: Causes skin irritation.

 Serious eye damage/eye irritation

Category 2: Causes serious eye damage.

 Respiratory/skin sensitization

Based on available data the classification criteria are not met.

 Germ cell mutagenicity

The product does not contain any ingredients at a concentration equal or higher than 0.1%, being listed as mutagen.

Based on available data the classification criteria are not met.

 Carcinogenicity


The product does not contain any ingredients at a concentration equal or higher than 0.1%, being listed as carcinogen at the International Agency for Cancer Research (IARC) or the American Conference for Governmental Industrial Hygienic (ACGIH).

Based on available data the classification criteria are not met.

 Reproductive toxicity

The product does not contain any ingredients at a concentration equal or higher than 0.1%, being listed as toxic for reproduction.

Based on available data the classification criteria are not met.

 Specific target organ toxicity for single exposure

Based on available data the classification criteria are not met.

 Specific target organ toxicity for multiple exposure

Based on available data the classification criteria are not met.

☾ Aspiration hazard

Based on available data the classification criteria are not met.

☾ Further information

Classification of preparation according to CLP-Regulation (EC) 1272/2008 Annex I respectively Annex VI.



## Section 12 Ecological information

- 12.1 Toxicity  
No eco-toxicological tests carried out on the product itself. Classification of preparation according to CLP-Regulation (EC) 1272/2008 Annex I and Annex VI.  
☾ Aquatic toxicity of single components  
No data available.
- 12.2 Persistence and degradability  
For inorganic substances, the methods for determining the biodegradability are not applicable.
- 12.3 Bioaccumulation potential  
No data available.
- 12.4 Mobility in soil  
No data available for the product itself.
- 12.5 Results of PBT- and vPvB-assessment  
For inorganic substances, the methods of PBT / vPvB determination acc. REACH not applicable.
- 12.6 Other adverse effects  
Do not dispose of the product undiluted with ground water/ waters or drains. There is no impairment expected when diluting with plenty of water.



## Section 13 Disposal considerations

- 13.1 Waste treatment methods  
Product residues have to be disposed of by authorized companies. Do not allow product to enter drains, soil or water bodies.  
☾ Waste key number  
52402g (ÖNORM S 2100); List of waste  
☾ Waste name  
Leaches, leach mixtures  
☾ European waste catalogue



060204\* (sodium- und potassium hydroxide)


Notice: The EWC-waste key is origin-related. This may lead to another classification. The decision is up to the end user.

 Contaminated packaging material

Recommendation: Empty container completely and deliver to a specialized company for reconditioning, recycling or disposal.



## Section 14 Transport information

- 14.1 UN-number  
UN 1824
- 14.2 Proper UN-shipping name  
ADR/RID: SODIUM HYDROXIDE SOLUTION  
IMDG: SODIUM HYDROXIDE SOLUTION
- 14.3 Transport hazard class  
  
8
- 14.4 Packing group  
III
- 14.5 Environmental hazards  
None.
- 14.6 Special precautions for the user  
Colorless fluid. Decomposes aluminum, zinc and tin. Generates ammonia gas in contact with ammonium salts. Causes burns to skin, eye and mucous membranes. Serious reacting with acids.  
EmS: F-A, S-B
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and according to IBC-Code  
Not relevant.



## Section 15 Regulatory information

- 15.1 Safety-, health-, ambient- and legislation specific instructions for the substance or mixture  
This safety data sheet complies with the Regulations (EC) Reach N° 1907/2006. The mixture is classified according to regulation (EC) 1272/2008 Annex I.

**National regulatory:**

## Austria:

- ☉ ChemG 1996-amendment 2011  
This product is classified hazardous (hazardous preparation) according to the Austrian chemical legislation of 1996-amendment 2011.
- ☉ VbF - Directive about combustible liquids (BGBl 1991/240)  
This product is not considered as combustible liquid acc. VbF.

## Germany:

- ☉ Regulations on Facilities Handling Substances Dangerous to Water (AwSV) dated 18 April 2017  
WHC1 (low water hazardous)
- ☉ Hazardous incidence ordinance  
Hazardous incidence ordinance, annex: not mentioned

## 15.2

## Chemical safety assessment

The mixture is not subject to material security test.



## Section 16 Other information

The information provided on this SDS is correct to the best of our knowledge and information, but not to be considered as warranty or quality specification nor creates contractual relationship. The information given is designed only as guidance for safe handling. Since unknown risk potentials can never be completely ruled out, the product should be handled with the usual care when dealing with chemicals and is only allowed for the uses listed in Section 1.

The categorization according to regulation CLP (EC) 1272/2008 is based on the classification of the single component according to Annex VI of regulation CLP (EC) 1272/2008 as well as upon manufacturer details completed by indications from hazardous material database and the ECHA.

- ☉ Relevant H- Phrases
  - H290 May be corrosive to metals.
  - H314 Causes severe skin burns and eye damage.
- ☉ Relevant hazard classification
  - Met. Corr. 1 Solids or alloys corrosive to metals category 1
  - Skin Corr. 1A Skin burns category 1A
  - Issue replaces previous version from 07.12.2018  
Changes in sections: 8.1
- ☉ Written by UmEnA GmbH (<http://www.umena.at>)
- Translated by WAPOTEC GmbH
- ☉ Short cuts PBT persistent, bio-accumulative, toxic  
vPvB high persistent, high bio-accumulative  
ECHA European Chemicals Agency (<http://www.echa.eu>)

