

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
- 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
- Solids or alloys corrosive to metals cat. 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.

2.3 Other hazards
Unknown.

Section 3 Composition/information on ingredients

3.2 Mixtures

Chemical characteristics

Alkaline solution of salt clays (siliceous aluminat 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 1.6.

** 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

Move affected person immediately to fresh air. Consult physician if disturbances occur.

Upon unconsciousness transport and rest in recovery 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 for 10 to 15 minutes with water holding eye lids apart. Consult a physician upon eye irritation.

☉ After ingestion

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

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 physician.



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_x

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

Don't 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 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
 Don't 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 acc. GKV 2011 An. I)

			TMW / KZW*		Exposure period
Name	CAS#		[ppm]	[mg/m ³]	[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)

- 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) 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

Tightly sealed 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 the canalization /groundwater/surface water.



Section 9

Physical and chemical properties

9.1 Information on basic physical and chemical properties.

☉ Appearance	Liquid
☉ Color	Colorless
☉ Odor	Odorless
☉ Odor threshold	No data available.
☉ pH (20° C)	Ca. 12
☉ Melting point	-6°C
☉ Boiling point / boiling range	approx. 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.
⦿ Vapor pressure (50 °C)	approx. 5 mbar
⦿ Density (20 °C)	1,03 g/cm ³
⦿ Water solubility (20 °C)	Soluble
⦿ Partition coefficient; n-octanol-water	No data available.
⦿ Auto ignition temperature	No data available.
⦿ Decomposition temperature	No data available.
⦿ Viscosity (20 °C)	No data available.
⦿ 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 No hazardous reaction when using according to 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 Do not expose high temperatures to avoid decomposing.
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 ₅₀ (rat) higher than 20 ml/kg
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LD₅₀ 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 sensitisation.

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

No data available.

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

No data available.

12.6 Other adverse effects

Do not dispose of the product undiluted with ground water/ waters or canalization. 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

Alcaline solution (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

1824

14.2 Proper UN-shipping name

ADR/RID: NATRIUMHYDROXIDLÖSUNG

IMDG: SODIUM HYDROXIDE SOLUTION

14.3 Transport hazard class



8

14.4 Packaging 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 mucosae. Serious reacting with acids.

EmS: F-A, S-B

14.7 Transport in bulk according to Annex II of MARPOL and according to IBC-Code

Not relevant.



Section 15 Regulatory information

15.1 Safety-, health-, ambient- and legislation specific instructions for 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:

-  Classification in water hazard classes according VwVwS dated 17.05.1999 /annex 4.
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.

- C Relevant H- Phrases
 - H290 May be corrosive to metals.
 - H314 Causes severe skin burns and eye damage
- C Relevant hazard classification
 - Met. Corr. 1 Solids or alloys corrosive to metals category 1
 - Skin irrit. 1A Skin burns category 1A
- Issue replaces previous version dated 06.03.2016
Amendments: 11, 14
- C Written by UmEnA GmbH (<http://www.umena.at>)
 - Translated by Wapotec GmbH
- C Short cuts PBT persistent, bio-accumulative, toxic
vPvB high persistent, high bio-accumulative
ECHA European Chemicals Agency (<http://www.echa.eu>)

