Safety data sheet
according to
Regulation (EC) 1907/2006

created:: 12.04.2009
updated: 25.11.2019

Section 1 Identification of the substance/mixture and the company

1.1	Product identifier	**DesoClean®**
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Identified use of substance	Alkaline cleaning of filter material and surfaces
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
Skin irritation cat. 1A
Serious eye damage cat. 1

H290	May be corrosive to metals.
H314	Causes serious burns to skin and eyes.
H318	Causes serious eye damage.

2.2 Identification labeling

according to Directive (EC) 1272/2008

Danger

H290	May be corrosive to metals.

H314	Causes serious burns to skin and eyes.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear suitable protective clothing/gloves and eye/face protection at work
P301 + P330 + P331	AFTER INGESTION: Rinse mouth. DO NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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	Call immediately POISON INFORMATION CENTER or physician.
P501	Dispose of content/container to Waste Disposal Facility.

Danger defining components for labeling

Sodium hydroxide (CAS: 1310-73-2)

2.3 Other hazards

Unknown.

Section 3 Composition/information on ingredients

3.2 Mixtures

Chemical characteristics

Alkaline solution of sodium hydroxide with harmless additions.

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	15 - 18	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

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 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 physician immediately.

- After ingestion

Rinse mouth with water. If victim is conscious: give plenty of water to drink. Consult physician immediately. Do not induce vomitting. Do not try any neutralisation!

4.2 Most important symptoms and effects, acute and delayed

No further information 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 Unsuitable extinguishing media for safety reasons

Ambient fire may release harmful vapors.

5.3 Special protective actions for fire-fighters

Special protective equipment: Wear self-contained breathing apparatus and full protective clothing. Prevent extinguishing water from entering into surface waters or ground water.

Section 6 Accidental release of material

6.1 Personal precautions, protective equipment and suitable emergency procedures.

Restricted access to affected area during cleaning.
Wear appropriate protective clothing.
Avoid skin and eye contact.
Ensure sufficient ventilation.

6.2 Environmental precautions

Do not empty into drains/surface water/ground water.
If the product enters the sewage system or aquatic environment, inform the appropriate authorities according to local laws.

6.3 Methods and material for retention and cleaning up.

Bind with absorbent material (sand, diatomaceous earth, universal binders, and 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 sufficient ventilation. Avoid contact with eyes and skin. Keep container tightened. Comply with legal safety and protection regulations. Wear protective clothing. Eye rinsing flasks/emergency showers are mandatory near the workplace.

7.2 Conditions for safe storage including any incompatibilities

- Fire and explosion protection measures

No special measures required. Do not smoke.

- Requirements on 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 containers.

- Recommended storage temperature: +5°C to +35°C, protect from sun
- VbF class: Not applicable.

7.3 Specific end uses

Alkaline cleaning of filter material and surfaces.

Section 8 Exposure controls/personal protection

8.1 Control parameters

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

			TMW / KZW*		Exposure per iod
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)

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/m³
Long-term exposure - local effects	Breathe in	1 mg/m³

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 end of work.
Avoid eye and skin contact.
Avoid inhaling vapors/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

Use respiratory protection if limit values are exceeded and/or vapors/aerosols occur.

- Hand protection

Protective gloves (chloroprene, 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. Selection of glove material in consideration of 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 empty into drains/surface water/ground water.
If the product enters the aquatic environment (rivers, lakes) or the sewage system, inform the appropriate authorities according to local laws.

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	Approx. 14
Melting point	-6 °C
Boiling point / boiling range	No data available.
Flash point	N. a.
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)	No data available.
Density (20 °C)	Approx. 1,2 g/cm^3
Water solubility (20°C)	Soluble, miscible in all proportions
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	Not explosive.
Oxidizing properties	No data available.

9.2 Further information

None

Section 10 Physical and chemical properties

10.1 Reactivity

No hazardous reaction when using according to intended purpose.

10.2 Chemical stability

No decomposition when using according to intended purpose.

10.3 Possibility of hazardous reactions

Explosion hazard with: metals, light metals: can form hydrogen (explosion hazard!)

Possible serious reactions with: acids, nitriles, alkaline earth metals in powder form, quaternary ammonium compounds, cyanides, magnesium, organic nitro compounds, organic combustible substances, phenols and oxidizable substances.

10.4 Conditions to avoid

Avoid extreme temperatures.

10.5 Incompatible materials

Avoid contact with metals, light metals and acids.

10.6 Hazardous decomposition products

No decomposition when using according to intended purpose.

Section 11 Toxicological information

11.1 Information on toxicological effects

The products itself was not subject to toxicity studies.

- LD_{50} values relevant for classification of individual components (literature value)

No data available.

- Acute toxicity

Based on available data the classification criteria are not met.
ATE_{mix} (oral, calculated) > 2000 mg/kg

- Corrosive/irritant to skin

Category 1A: Causes serious burns to skin and eye damage.

- Serious eye damage/eye irritation

Category 1: 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.

After inhalation: Mucosae burns.
After skin contact: Burns, necrosis.
After eye contact: Burns, necrosis, danger of blindness!
After ingestion: Burns in mouth, mucosae, oesophagus. Danger of perforation for stomach and oesophagus.

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 respectively 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 Bio-accumulative 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 empty into ground water, water bodies or sewage system.
Harmful effect due to pH shift. Death of fish possible. Neutralization in sewage treatment plants possible.

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

Alkaline solution, alkaline solution mixtures

- European waste catalogue

060204* (sodium- und potassium hydroxide)

Notice: EAK-waste key is source-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 Packing group

II

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. Reacts strongly 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- and environmental regulations/legislation specific 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 and Annex VI.

National regulatory:

Austria:

- ChemG 1996 – amendment 2011
  This product is classified hazardous 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
  WHC 1 (slightly water pollutant)
- 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 only 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 irrit. 1A	Skin irritation category 1A

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	Changes in sections: 8.1
Written by	UmEnA GmbH (http://www.umena.at)
Translated by	WAPOTEC GmbH
Short cuts	n. t. not tested
	n. a. not applicable
	WHC water hazard class
	PBT persistent, bio-accumulative, toxic
	vPvB high persistent, high bio-accumulative
	ECHA European Chemicals Agency (http://www.echa.eu)