

Section 1 Identification of the substance/mixture and the company

- 1.1 Product identifier **HydroXan®**
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified use of substance Oxidant
- 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
Not app.
The product is not classified as dangerous.
- 2.2 Label elements
according to Directive (EC) 1272/2008
Not app.
The product is not classified as dangerous according to Directive (EC) 1272/2008.
- 2.3 Other hazards
Generation of chlorine gas after contact with concentrated acids.

Section 3 Composition/information on ingredients

- 3.2 Mixtures
Chemical characteristics

Tetrachlorodecaoxide complex (TCDO-anion), aqueous solution





CAS- no. 92047-76-2
ELINCS-no. 420-970-2
Registration no. 01-0000016753-67-0001

 Dangerous ingredients

None.


Section 4

First-aid measures

- 4.1 Description of first-aid measures
- Consult a doctor if disturbances occur.
No serving in case of unconsciousness or cramps.
Remove immediately all contaminated clothing.
Rinse contaminated clothing immediately.
-  After inhalation
- Usually no effects.
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 a doctor if disturbances occur.
-  After eye contact
- After eye contact, rinse eye for 10 to 15 minutes with water holding eye lids apart.
Consult a doctor upon eye irritation.
-  After ingestion
- Rinse mouth with cold water.
As first aid measure make person drink (100–150ml) a solution of diluted (1-2 %) ascorbic acid.
Otherwise drink plenty of water. See a doctor immediately.
- 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 nonflammable. Adapt extinguishing media to environment.

ⓘ Unsuitable extinguishing media for safety reasons

None.

5.2 Special hazards arising from the substance or mixture

Unknown.

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 appropriate protective clothing.

Ensure sufficient ventilation. Avoid contact to substance.

6.2 Environmental precautions

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

6.3 Methods and material for retention and cleaning up.

Dilute with plenty of water and dispose off as sewage (unless unsuitable due to chemical/technical reasons and/or provisions). High assimilative capacity.

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

No special measures or precautions necessary for handling, storage, transport or in case of fire with water diluted solutions till 10 g TCDO/l max or higher (1:100 till 1:1000). Utility solutions require no special measures or precautions when handling, storing, transporting or firing.

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 the original container gas tight.

Do not store with acids and other chlorine products.

ⓘ Material incompatibility

Unknown.

ⓘ Recommended storage

+5°C to +35°C, protect from sun

temperature

☐ VbF class Not applicable.

7.3 Specific end uses

Oxidant.

Section 8 Exposure controls/personal protection

8.1 Control parameters

The product does not contain relevant quantities of substances with critical values that have to be monitored at the workplace.

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 of steams/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

Not necessary.

☐ Hand protection

Not necessary.

☐ Eye protection

Tightly sealed goggles.

☐ Personal protection

Appropriate protective clothes.

☐ Environmental exposure controls

Do not allow undiluted product 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

☐ Colour Pastel green to transparent

☐ Odour Characteristic, not unpleasant

○	Odour threshold	No data available.
○	pH	Approx. 8.2 – 8.4
○	Melting point	-11 °C
○	Boiling point / boiling range	102.6 °C
○	Flash point	Not applicable
○	Evaporation rate	No data available.
○	Flammability	Not applicable (active component exists only in aqueous solutions)
○	Upper explosion limit	No data available.
○	Lower explosion limit	No data available.
○	Vapor pressure (25 °C)	2.7 kPa
○	Density (20°C)	1.099 g/cm ³
○	Water solubility (20°C)	Soluble, user-defined mixable.
○	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	Oxidant
9.2	Other data	
	○ Surface tension	79,5 Nm / 20 °C

Section 10

Stability and reactivity

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	Mixing with other acids can generate chlorine dioxide.
10.4	Conditions to avoid	Do not expose to extreme temperatures.
10.5	Incompatible materials	Avoid contact with acids and other chlorine products.
10.6	Hazardous decomposition products	

Due to an inappropriate handling and contamination with concentrated acids chlorine dioxide can be generated.

Section 11

Toxicological information

11.1

Information on toxicological effects

LD₅₀ values relevant for classification of individual components

TCDO:

LD₅₀ (rat) 4.58ml/kg-LW (live weight) (24 hours)

LD₅₀ (rabbit) negative: 10% solution does not show conjunctive irritations after application.

According to valuation key of Etad-Sub-Committee for Toxicology

- classified non-irritant (LC₅₀(96h) > 1000 ppm)
- concentrate very poor conjunctival irritation up to 24 hours after application

Acute toxicity

Based on available data the classification criteria are not met.

Corrosive/irritant to skin

Based on available data the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data the classification criteria are not met.

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 classified 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 classified 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


No toxicological effects on skin cells (recombinant cells).

The mixture was classified according to the calculation method of CLP Regulation (EC) 1272/21008 Annex I.

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.
No adverse effect of the product to be expected if diluted with plenty of water.
-  Aquatic toxicity of individual components
- TCDO:
Acute toxicity fish:
LC50 (96 h) >1000 mg/l rainbow trout (*Oncorhynchus mykiss*)
Acute toxicity daphnia:
EC50 (24 h): 1210 mg/l – *Daphnia magna*
Algae toxicity:
EC50 (72 h): appr. 430 mg/l – *Scenedesmus subspicatus*
NOEC (72 h) > 80 mg/l – *Scenedesmus subspicatus*
- 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 for the product itself.
- 12.6 Other adverse effects
- Do not allow undiluted product to reach ground water, water course or sewage system.

Section 13 Disposal considerations

- 13.1 Waste treatment methods
- Dilute with plenty of water, can be disposed of down the drain (as long as there are no respectively chemical, technical or legal directives).
-  Waste key number
- Not applicable.

☾ Waste name

Not applicable

☾ European waste catalogue

The EWC-waste key is origin-related. This may lead to a change in the 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

No dangerous goods in the sense of the transport regulations for land, air and sea

14.1

UN-Number

Void.

14.2

Proper UN-shipping name

Void.

14.3

Transport hazard class

Void.

14.4

Packing group

Void.

14.5

Environmental hazards

Void.

14.6

Special precautions for the user

Void.

14.7

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

Void.

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 not classified as a hazardous mixture (no hazardous preparation) according to the Austrian chemical legislation of 1996- amendment 2011.

-  VbF - Directive about combustible liquids (BGBl 1991/240)
This product is not classified as combustible liquid acc. VbF.

Germany:

-  Regulations on Facilities Handling Substances Dangerous to Water (AwSV) dated 18 April 2017
WHC 1 (low water hazardous)
-  Hazardous Incident Ordinance
Hazardous Incident Ordinance, Annex: Not mentioned.

15.2 Chemical safety assessment







The mixture is not subject to safety assessment.

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
Not applicable.
-  Relevant hazard classification
Not applicable.
-  Edition Replaces previous versions
-  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
WHC water hazard class
ECHA European Chemicals Agency (<http://www.echa.eu>)