

**Sicherheitsdatenblatt**  
gemäß 1907/2006/EG, Artikel 31

Printing date 05.01.2023

Version number 3 (replaces version 2)

Revision: 05.01.2023

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

- **1.1 Product identifier**
- **Trade name:** **Dioxal Liquid**
- **UFI:** T880-Y08G-V00A-A4YA
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Biocide
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
BWT Holding GmbH  
Walter-Simmer-Straße 4  
A - 5310 Mondsee  
AUSTRIA  
Tel.: +43/6232/5011-0  
Fax: +43/6232/4058  
email: office@bwt.at
- **Further information obtainable from:**  
Abteilung F&E - Chemikalienbeauftragte(r)  
Tel.: +43/6232/5011-1893  
+43/6232/5011-1427  
e-mail: msds-info@bwt-group.com
- **1.4 Emergency telephone number:**  
Poison center Vienna  
Tel.: +43/1-406 43 43

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS07



GHS08

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· **Signal word** Danger· **Hazard-determining components of labelling:**

sodium chlorite

· **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**






EUH032 Contact with acids liberates very toxic gas.

Contains biocidal products: sodium chlorite

· **2.3 Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

CAS: 7758-19-2	sodium chlorite	≥10-<25%
EINECS: 231-836-6	 Ox. Sol. 1, H271	
Reg.nr.: 01-2119529240-51-xxxx	 Acute Tox. 3, H301; Acute Tox. 2, H310	
	 STOT RE 2, H373	
	 Skin Corr. 1A, H314	
	 Aquatic Acute 1, H400 (M=1)	
	Aquatic Chronic 3, H412	
	EUH032, EUH071	

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

· **4.1 Description of first aid measures**· **General information:**

Immediately remove any clothing soiled by the product.

Take affected persons out of danger area and lay down.

Involve doctor immediately.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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*In case of unconsciousness place patient stably in side position for transportation.*

· **After skin contact:**

*Immediately wash with water and soap and rinse thoroughly.*

*Generally the product does not irritate the skin.*

*If skin irritation continues, consult a doctor.*

· **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*

· **After swallowing:** *If symptoms persist consult doctor.*

· **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

· **4.3 Indication of any immediate medical attention and special treatment needed**

*No further relevant information available.*

### SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:**

*CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.*

· **5.2 Special hazards arising from the substance or mixture**

*Formation of toxic gases is possible during heating or in case of fire.*

· **5.3 Advice for firefighters**

· **Protective equipment:**

*Mouth respiratory protective device.*

*Wear fully protective suit.*

· **Additional information**

*Cool endangered receptacles with water spray.*

*Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*

### SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

*Mount respiratory protective device.*

*Wear protective equipment. Keep unprotected persons away.*

*Ensure adequate ventilation*

· **6.2 Environmental precautions:**

*Dilute with plenty of water.*

*Do not allow to enter sewers/ surface or ground water.*

*Suppress gases/fumes/haze with water spray.*

· **6.3 Methods and material for containment and cleaning up:**

*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*

*Dispose contaminated material as waste according to item 13.*

*Ensure adequate ventilation.*

· **6.4 Reference to other sections**

*See Section 7 for information on safe handling.*

*See Section 8 for information on personal protection equipment.*

*See Section 13 for disposal information.*

### SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

*Ensure good ventilation/exhaustion at the workplace.*

*Prevent formation of aerosols.*

· **Information about fire - and explosion protection:** *No special measures required.*

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** *Store only in the original receptacle.*

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- **Information about storage in one common storage facility:**  
Do not store together with acids.  
Store away from flammable substances.
- **Further information about storage conditions:** None.
- **Storage class:** 8B
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Tightly sealed goggles

- **Body protection:** Protective work clothing

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### SECTION 9: Physical and chemical properties

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

##### · General Information

· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	-3 °C
· Boiling point or initial boiling point and boiling range	100 °C
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH at 20 °C	12 - 13
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	20 hPa
· Density and/or relative density	
· Density at 20 °C:	1,20 - 1,25 g/cm <sup>3</sup>
· Relative density	Not determined.
· Vapour density	Not determined.

#### · 9.2 Other information

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Not determined.
· Solvent content:	
· Organic solvents:	0,0 %
· Water:	75,5 %
· VOC (EC)	0,00 %
· Solids content:	24,5 %
· Change in condition	
· Evaporation rate	Not determined.

#### · Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void

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· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid**  
Heat exposure  
heat exposure  
No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**  
Harmful if swallowed or in contact with skin.

· **LD/LC50 values relevant for classification:**

**CAS: 7758-19-2 sodium chlorite**

Oral	LD50	284 mg/kg (rat)
Dermal	LD50	134 mg/kg (rabbit)

- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
- **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**  
May cause damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

**CAS: 7758-19-2 sodium chlorite**

EC50 (static)	1 mg/L /96h (algae)
	<1 mg/L /48h (daphnia)
LC50/96h	106 mg/l (reg)

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**· 12.2 Persistence and degradability**

The methods for determining biodegradability are not applicable to inorganic substances. Sodium chlorite is expected to be rapidly reduced in the environment, especially under anaerobic conditions.

**· 12.3 Bioaccumulative potential**

log Kow -2.7 (25 °C) (OECD Test Guideline 107) Sodium chlorite (CAS No. 7758-19-2)

The product has a low bioaccumulative potential.

**· 12.4 Mobility in soil** No further relevant information available.

**· 12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**· 12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**· 12.7 Other adverse effects**
**· Additional ecological information:**
**· General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

### SECTION 13: Disposal considerations

**· 13.1 Waste treatment methods**
**· Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**· European waste catalogue**

06 07 04*	solutions and acids, for example contact acid
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**· Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

**· 14.1 UN number or ID number**
**· ADR, IMDG, IATA**

UN1908

**· 14.2 UN proper shipping name**
**· ADR**

1908 CHLORITE SOLUTION

**· IMDG**

CHLORITE SOLUTION, MARINE POLLUTANT

**· IATA**

CHLORITE SOLUTION

**· 14.3 Transport hazard class(es)**
**· ADR, IMDG, IATA**

**· Class**

8 Corrosive substances.

**· Label**

8

**· 14.4 Packing group**
**· ADR, IMDG, IATA**

II

**· 14.5 Environmental hazards:**

Product contains environmentally hazardous substances: sodium chlorite

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· <b>Marine pollutant:</b>	Yes
· <b>14.6 Special precautions for user</b>	Warning: Corrosive substances.
· <b>Hazard identification number (Kemler code):</b>	80
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Chlorites
· <b>Stowage Category</b>	B
· <b>Segregation Code</b>	SG6 Segregation as for class 5.1 SG8 Stow "away from" class 4.1 SG10 Stow "away from" class 5.1 SG12 Stow "away from" class 7 SG20 Stow "away from" SGG1-acids
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1908 CHLORITE SOLUTION, 8, II

### SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

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- **National regulations:**
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

- **Relevant phrases**

- H271 May cause fire or explosion; strong oxidiser.
- H301 Toxic if swallowed.
- H310 Fatal in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.
- EUH032 Contact with acids liberates very toxic gas.
- EUH071 Corrosive to the respiratory tract.

- **Version number of previous version: 2**

- **Abbreviations and acronyms:**

- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Ox. Sol. 1: Oxidizing solids – Category 1
- Acute Tox. 3: Acute toxicity – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Acute Tox. 2: Acute toxicity – Category 2
- Skin Corr. 1A: Skin corrosion/irritation – Category 1A
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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