

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

- **1.1 Product identifier**
- Trade name: **Dioxal 20**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against -**
- Application of the substance / the mixture *Disinfectant*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 BWT AG  
 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 - Chemikalienbeauftragter  
 Tel.: +43/6232/5011-1427  
 email: msds-info@bwt-group.com
- **1.4 Emergency telephone number:**  
 Vergiftungsinformation Wien  
 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



GHS03 flame over circle

Ox. Sol. 2      H272 May intensify fire; oxidiser.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.

- **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**



GHS03



GHS05

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
*sodium chlorite*
- **Hazard statements**  
 H272 May intensify fire; oxidiser.  
 H314 Causes severe skin burns and eye damage.
- **Precautionary statements**  
 P221 Take any precaution to avoid mixing with combustibles.  
 P260 Do not breathe dusts or mists.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.

(Contd. on page 2)

**Trade name: Dioxal 20**

(Contd. of page 1)

P301+P312 **IF SWALLOWED:** Call a POISON CENTER/doctor if you feel unwell.

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/shower.

P304+P340 **IF INHALED:** Remove person to fresh air and keep 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 **Immediately call a POISON CENTER/doctor.**

P405 **Store locked up.**

· **Additional information:**

EUH032 Contact with acids liberates very toxic gas.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.





· **vPvB:** Not applicable.

\* **SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 7758-19-2	sodium chlorite	 Ox. Sol. 2, H272	2.5-10%
EINECS: 231-836-6		 Acute Tox. 3, H301; Acute Tox. 3, H311	
		 Skin Corr. 1A, H314	
		 Aquatic Acute 1, H400	

· **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:**

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.

Call a doctor immediately.

· **After skin contact:**

Immediately rinse with water.

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:**

Rinse out mouth and then drink plenty of water.

Call for a doctor immediately.

· **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:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

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

In case of fire, the following can be released:

(Contd. on page 3)

**Trade name: Dioxal 20**

(Contd. of page 2)

Chlorine gas

- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**  
Do not allow to enter sewers/ surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Pick up mechanically.  
Dispose contaminated material as waste according to item 13.
- **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**  
Keep receptacles tightly sealed.  
Open and handle receptacle with care.  
Prevent formation of dust.
- **Information about fire - and explosion protection:** Protect from heat.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Store only in the original receptacle.
- **Information about storage in one common storage facility:**  
Store away from reducing agents.  
Store away from flammable substances.  
Do not store together with acids.
- **Further information about storage conditions:** Store in dry conditions.
- **Storage class:** 5.1B
- **7.3 Specific end use(s)** No further relevant information available.

### **SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.
- **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**
- **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:** Dustfilter when dust develops.

(Contd. on page 4)

**Trade name: Dioxal 20**

(Contd. of page 3)

**· Protection of hands:**


Protective gloves

**· Material of gloves**

PVC gloves

Nitrile rubber, NBR

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 protection:**


Tightly sealed goggles

**· Body protection: Protective work clothing**
**SECTION 9: Physical and chemical properties**
**· 9.1 Information on basic physical and chemical properties**
**· General Information**
**· Appearance:**
**Form:** Powder

**Colour:** White

**· Odour:** Odourless

**· Odour threshold:** Not determined.

**· pH-value at 20 °C:** 8.1

**· Change in condition**
**Melting point/freezing point:** Undetermined.

**Initial boiling point and boiling range:** Undetermined.

**· Flash point:** Not applicable.

**· Flammability (solid, gas):** Not determined.

**· Ignition temperature:**
**Decomposition temperature:** Not determined.

**· Auto-ignition temperature:** Product is not selfigniting.

**· Explosive properties:** Product does not present an explosion hazard.

**· Explosion limits:**
**Lower:** Not determined.

**Upper:** Not determined.

**· Vapour pressure:** Not applicable.

**· Density:** Not determined.

**· Relative density** Not determined.

**· Vapour density** Not applicable.

**· Evaporation rate** Not applicable.

(Contd. on page 5)

**Trade name: Dioxal 20**

(Contd. of page 4)

- |   |  |
|---|--|
| · <b>Solubility in / Miscibility with water at 20 °C:</b> | 370 g/l                                    |
| · <b>Partition coefficient: n-octanol/water:</b>          | Not determined.                            |
| · <b>Viscosity:</b>                                       |  |
| <b>Dynamic:</b>   | Not applicable.                            |
| <b>Kinematic:</b>   | Not applicable.                            |
| · <b>Solvent content:</b>                                 |  |
| <b>Organic solvents:</b>                                  | 0.0 %                                      |
| <b>Solids content:</b>                                    | 100.0 %                                    |
| · <b>9.2 Other information</b>                            | No further relevant information available. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Temperatures > 150 °C
- **10.3 Possibility of hazardous reactions**
  - Reacts with flammable substances.
  - Reacts with acids.
  - Reacts with oxidising agents.
  - Reacts with organic substances.
  - Reacts with reducing agents.
- **10.4 Conditions to avoid** Moisture
- **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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

7758-19-2 sodium chlorite

Oral LD50 284 mg/kg (rat)

- **Primary irritant effect:**
- **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.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

(Contd. on page 6)

**Trade name: Dioxal 20**

(Contd. of page 5)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### 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**

16 09 04*	oxidising substances, not otherwise specified
-----------	---

- **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

- |   |                                |
|---|--------------------------------|
| · <b>14.1 UN-Number</b>   | UN1496                         |
| · <b>ADR, IMDG, IATA</b>  |                                |
| · <b>14.2 UN proper shipping name</b>   | 1496 SODIUM CHLORITE           |
| · <b>ADR</b>  | SODIUM CHLORITE                |
| · <b>IMDG, IATA</b>   |                                |
| · <b>14.3 Transport hazard class(es)</b>  |                                |
| · <b>ADR, IMDG, IATA</b>  |                                |
|  |                                |
| · <b>Class</b>  | 5.1 Oxidising substances.      |
| · <b>Label</b>  | 5.1                            |
| · <b>14.4 Packing group</b>   | II                             |
| · <b>ADR, IMDG, IATA</b>  |                                |
| · <b>14.5 Environmental hazards:</b>  |                                |
| · <b>Marine pollutant:</b>  | No                             |
| · <b>14.6 Special precautions for user</b>  | Warning: Oxidising substances. |
| · <b>Danger code (Kemler):</b>  | 50                             |
| · <b>EMS Number:</b>  | F-H,S-Q                        |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>    | Not applicable.                |

(Contd. on page 7)



**Trade name: Dioxal 20**

(Contd. of page 6)

**· Transport/Additional information:**
**· ADR**

- **Limited quantities (LQ)** 1 kg
- **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g
- **Transport category** 2
- **Tunnel restriction code** (E)

**· IMDG**

- **Limited quantities (LQ)** 1 kg
- **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g

- **UN "Model Regulation":** UN1496, SODIUM CHLORITE, 5.1, 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.
- **Seveso category P8** OXIDISING LIQUIDS AND SOLIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **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**

- H272 May intensify fire; oxidiser.
- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H400 Very toxic to aquatic life.

**· Abbreviations and acronyms:**

- ADR: Accord européen sur le transport 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)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- Ox. Sol. 2: Oxidizing solids – Category 2
- Acute Tox. 3: Acute toxicity – Category 3
- Skin Corr. 1A: Skin corrosion/irritation – Category 1A
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

- **\* Data compared to the previous version altered.**