

Sicherheitsdatenblatt gemäß 1907/2006/EG, Artikel 31

Printing date 14.08.2024

Version number 3 (replaces version 2)

Revision: 14.08.2024

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

- **1.1 Product identifier**
- **Trade name:** **Birm regular**
- **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** Water treatment
- **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
email: 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.

- **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**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
manganese dioxide
- **Hazard statements**
H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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· **vPvB:** Not applicable.· **Determination of endocrine-disrupting properties**

This product does not contain ingredients with endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1% (w/w) or more.

SECTION 3: Composition/information on ingredients

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

CAS: 1313-13-9 EINECS: 215-202-6	manganese dioxide  STOT RE 2, H373  Acute Tox. 4, H302; Acute Tox. 4, H332	≥10-≤25%
CAS: 14808-60-7 EINECS: 238-878-4	quartz (SiO ₂) substance with a Community workplace exposure limit	50-75%

· **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:**

Do not remove respiratory protection until contaminated clothing has been removed.

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 or oxygen; call for doctor.

Semi-sitting posture, no physical exertion.

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

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

Consult a doctor if symptoms persist.

· **After swallowing:**

Rinse out mouth and then drink plenty of water.

Seek medical treatment.

Never administer anything by mouth to an unconscious person.

Do not induce vomiting; call for medical help immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**

Breathing difficulty

Coughing

Asthma attacks

Thirst

Gastric or intestinal disorders

Conjunctivitis of the eye

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

If swallowed, gastric irrigation.

If necessary oxygen respiration treatment.

Medical supervision for at least 48 hours.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray.
Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
In the event of a fire, the following can be released:
Oxygen (fire promoting)
Manganese oxides
Silicate smoke
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus in accordance with EN 137.
Wear full protective suit according to EN 469.
Do not inhale explosion and combustion gases.
- **Additional information**
Fire residues and contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Avoid formation of dust.
Keep people at a distance and stay on the windward side.
- **6.2 Environmental precautions:**
Dike larger quantities so that nothing gets into the water or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Avoid dust formation.
Dispose contaminated material as waste according to section 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**
The product is not flammable.
Substance/product is oxidising when dry.
Fire hazard when mixed with organic substances.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store only in the original receptacle.
Store in a cool and dry place.
- **Information about storage in one common storage facility:** Store away from flammable substances.
- **Further information about storage conditions:** Store under lock and key and out of the reach of children.

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- **Storage class: 11**
- **7.3 Specific end use(s)** For industrial and commercial applications only.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

CAS: 14808-60-7 quartz (SiO₂)

MAK (Germany) alveolengängige Fraktion

CAS: 1313-13-9 manganese dioxide

 AGW (Germany) Long-term value: 0,02A; 0,2E mg/m³
8(II);DFG,Y,10, 20

· **DNELs**

CAS: 1313-13-9 manganese dioxide

 Dermal DNEL dermal 0,00414 mg/kg bw/day (worker)
langfristige systemische Einwirkung

 Inhalative DNEL inhalativ 0,2 mg/m³ (worker)
langfristige systemische Einwirkung

· **Ingredients with biological limit values:**

CAS: 1313-13-9 manganese dioxide

 BGW (Germany) 20 µg/l
Untersuchungsmaterial: Vollblut
Probennahmezeitpunkt: bei Langzeitexposition: am Schichtende nach mehreren
vorangegangenen Schichten, Expositionsende bzw. Schichtende
Parameter: Mangan

 · **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Respiratory protection:**
Filter P2
EN 140
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

 Neoprene gloves
Rubber gloves
according to EN 374

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.

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- **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**

EN 166



Tightly sealed goggles

- **Body protection:** Apron according to EN 14605

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Physical state**

Solid

- **Colour:**

Dark brown

- **Odour:**

Odourless

- **Odour threshold:**

Not determined.

- **Melting point/freezing point:**

Undetermined.

- **Boiling point or initial boiling point and boiling range**

Undetermined.

- **Flammability**

Not determined.

- **Lower and upper explosion limit**

- **Lower:**

Not determined.

- **Upper:**

Not determined.

- **Flash point:**

Not applicable.

- **Decomposition temperature:**

Not determined.

- **pH**

Mixture is non-soluble (in water).

- **Viscosity:**

- **Kinematic viscosity**

Not applicable.

- **Dynamic:**

Not applicable.

- **Solubility**

- **water:**

Insoluble.

- **Partition coefficient n-octanol/water (log value)**

Not determined.

- **Vapour pressure:**

Not applicable.

- **Density and/or relative density**

- **Density at 20 °C:**

2,25 g/cm³

- **Relative density**

Not determined.

- **Bulk density at 20 °C:**

1400 kg/m³

- **Vapour density**

Not applicable.

- **Particle characteristics**

See section 3.

- **9.2 Other information**

- **Appearance:**

- **Form:**

Granulate

- **Important information on protection of health and environment, and on safety.**

- **Ignition temperature:**

Product is not selfigniting.

- **Explosive properties:**

Product does not present an explosion hazard.

- **Solvent content:**

- **Organic solvents:**

0,0 %

- **Solids content:**

100,0 %

- **Change in condition**

- **Evaporation rate**

Not applicable.

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· 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
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
Develops chlorine gas with hydrochloric acid.
Reacts with a wide range of reducing agents.
- **10.2 Chemical stability**
Stable under normal storage conditions.
No tendency to polymerise.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with peroxides.
- **10.4 Conditions to avoid** Heat exposure
- **10.5 Incompatible materials:**
Hydrochloric acid
Reductive
Flammable substances
Hydrofluoric acid
- **10.6 Hazardous decomposition products:**
Oxygen
Manganese oxides

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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.

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· **Additional toxicological information:**

14808-60-7 Quartz (dust particles < 5 µm): Target organ: Lungs, clinical picture of silicosis, granuloma formation in the further course, increased susceptibility to lung cancer and tuberculosis.

1313-13-9 Manganese dioxide: Target organs: central nervous system, respiratory tract, eyes, effects of chronic manganese poisoning in humans: feeling of weakness, fine-beat tremor, slow monotone voice, mask face, Parkinson's-like symptoms, tendency to respiratory and lung diseases. Reproductive toxicity (inhalation, mouse): At exposure 75 days before mating of 49 mg/m³/7 h effects on offspring noticeable.

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:** No further relevant information available.

· **12.2 Persistence and degradability**

Anorganic product, is not eliminable from water by means of biological cleaning processes.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **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:**

· **According to the formulation contains the following heavy metals and compounds from the EU guideline NO. 2006/11/EC:**

Manganese

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation** Smaller quantities can be disposed of with household waste.

· **European waste catalogue**

06 03 13* solid salts and solutions containing heavy metals

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

· **Uncleaned packaging:**

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

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR, ADN, IMDG, IATA** Void

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- | | |
|---|-----------------|
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | Void |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | Void |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS08

- **Signal word** Warning
- **Hazard-determining components of labelling:**
manganese dioxide
- **Hazard statements**
H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **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.

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· **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.

· **National regulations:**

· **TRGS 559** Quartz dust

· **TRGS 906** List of carcinogenic activities or processes according to §3 para. 2 no. 3 GefStoffV.

· **Technical instructions (air):**

Class	Share in %
III	20,0

· **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly 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.

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Relevant phrases**

H302 Harmful if swallowed.

H332 Harmful if inhaled.

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

· **Date of previous version:** 03.07.2024

· **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)

DNEL: Derived No-Effect Level (REACH)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· *** Data compared to the previous version altered.**

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