

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 26.11.2016

Version number 3

Revision: 26.11.2016

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

#### - 1.1 Product identifier

- Trade name: Entfärber

- CAS Number:

7775-14-6

- EC number:

231-890-0

- Index number:

016-028-00-1

- Registration number 01-2119520510-57-xxxx

#### - 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

Decolourant

for professional use

#### - 1.3 Details of the supplier of the safety data sheet

##### - Manufacturer/Supplier:

BurnusHychem GmbH

Röblerstraße 94

D-64293 Darmstadt

Tel. +49-66 63 976 100

Fax +49-66 63 976 200

Email: contact@burnushychem.com

- Further information obtainable from: Telefon: +49-66 63-976-100

- Department issuing MSDS: J.Wenninger@burnushychem.com

#### - 1.4 Emergency telephone number:

Beratungsstelle bei Vergiftungen, Universitätsklinikum Mainz

Telefon: 06131-19240

### SECTION 2: Hazards identification

#### - 2.1 Classification of the substance or mixture

##### - Classification according to Regulation (EC) No 1272/2008

Self-heat. 1 H251 Self-heating; may catch fire.

Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation.

#### - 2.2 Label elements

##### - Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

##### - Hazard pictograms



GHS02 GHS07

##### - Signal word Danger

##### - Hazard-determining components of labelling:

sodium dithionite

##### - Hazard statements

H251 Self-heating; may catch fire.

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H302 Harmful if swallowed.

H319 Causes serious eye irritation.

**- Precautionary statements**

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

P235+P410 Keep cool. Protect from sunlight.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

P420 Store away from flammable substances.

**- Additional information:**

EUH031 Contact with acids liberates toxic gas.

**- 2.3 Other hazards****- Results of PBT and vPvB assessment****- PBT:** Not applicable.**- vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****- 3.1 Substances****- CAS No. Description**

7775-14-6 sodium dithionite

**- Identification number(s)****- EC number:** 231-890-0**- Index number:** 016-028-00-1**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.

Immediately remove any clothing soiled by the product.

**- After inhalation:**

Supply fresh air or oxygen; call for doctor.

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

**- After skin contact:**

After contact with skin, wash immediately with plenty of soap and water.

If skin irritation continues, consult a doctor.

**- After eye contact:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

**- After swallowing:**

Rinse out mouth and then drink plenty of water.

If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

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

Burning of the eyes and mucous membranes.

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

No further relevant information available.

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### SECTION 5: Firefighting measures

**- 5.1 Extinguishing media**

- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder, plenty of water
- **For safety reasons unsuitable extinguishing agents:** Water spray (small quantities)

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

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

May cause fire. May re-ignite itself after fire is extinguished. This material increases the risk of fire and may aid combustion. In a fire or if heated, a pressure increase will occur and the container may burst. Runoff to sewer may create fire or explosion hazard.

In case of fire, the following can be released:

Sulphur oxides (SO<sub>x</sub>)

Danger of forming toxic pyrolysis products.

Under certain fire conditions, traces of other toxic gases cannot be excluded.

**- 5.3 Advice for firefighters****- Protective equipment:**

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

**- Additional information**

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**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Avoid formation of dust.

**- 6.2 Environmental precautions:**

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

Inform respective authorities in case of seepage into water course or sewage system.

Suppress gases/fumes/haze with water spray.

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

Ensure adequate ventilation.

Pick up mechanically.

Flush away residues with plenty of water.

Never use saw-dust or other flammable substances.

Never replace spilled product into original containers (danger of decomposition).

Dispose of the material collected according to regulations.

**- 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 10 for information on "stability and reactivity".

See Section 13 for disposal information.

### SECTION 7: Handling and storage

**- 7.1 Precautions for safe handling**

Keep receptacles tightly sealed.

Do not seal receptacles gas-tight.

Prevent formation of dust.

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Ensure good ventilation/exhaustion at the workplace.

The product should only be taken with dry shovels; then the container is to be resealed well. In the event of incorrect storage and taking out (ingress of moisture) the product decomposes. Lumps are formed, heat and gas develop (smell of sulphur dioxide) leading to spontaneous combustion, particularly when atmospheric oxygen is admitted. It could also happen that the packaging is damaged by improper handling during transport, moisture gets into the container and the product decomposes as a result. It is therefore to be recommended that the containers are rearranged after unloading. If lumps are discovered in a container, these must be removed immediately using a coarse meshed sieve and if possible immersed in an open container with plenty of water.

**- Information about fire - and explosion protection:**

Danger of self inflammation exists on contact with air humidity or with small amounts of water.

The product may cause fire due to release of oxygen. May be explosive, when combined with flammable substances.

Violent release of gases on decomposition.

Keep ignition sources away - Do not smoke.

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

**- Storage:**

**- Requirements to be met by storerooms and receptacles:** No special requirements.

**- Information about storage in one common storage facility:**

Store away from flammable substances.

Do not store together with acids.

Store away from foodstuffs.

**- Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from exposure to the light.

Protect from humidity and water.

Store under lock and key and out of the reach of children.

**- Maximum storage temperature:** 40 °C

**- Minimum storage temperature:** 0 °C

**- 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:**

**7775-14-6 sodium dithionite**

MAK (Germany) vgl. Abschn. IV

**- PNECs**

**7775-14-6 sodium dithionite**

PNEC Süßwasser 1 mg/l

PNEC Meerwasser 0,1 mg/l

**- CAS No. Designation of material % Type Value Unit**

**- Additional Occupational Exposure Limit Values for possible hazards during processing:**

The mentioned substance is result of gradual decomposition under influence of atmospheric humidity: Sulphur dioxide

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**7446-09-5 sulphur dioxide**

AGW (Germany)	Long-term value: 2,5 mg/m <sup>3</sup> , 1 ppm 1(I);AGS, Y
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- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures are to be adhered to when handling chemicals.  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not inhale dust / smoke / mist.
- **Respiratory protection:**  
When dust is formed: Use a breathing protection  
Filter P2
- **Protection of hands:**  
Protective gloves (EN 374)  
Check protective gloves prior to each use for their proper condition.  
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**  
Butyl rubber, BR  
Nitrile rubber, NBR  
Chloroprene rubber, CR  
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.
- **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:** Safety glasses

**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Powder
<b>Colour:</b>	White
<b>Odour:</b>	Pungent
<b>Odour threshold:</b>	Not determined.
<b>pH-value:</b>	Not applicable.
- **Change in condition**

<b>Melting point/Melting range:</b>	~52 °C
<b>Boiling point/Boiling range:</b>	Undetermined.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** May cause fire.

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- **Ignition temperature:**
- **Decomposition temperature:** ~52 °C
- **Self-igniting:** Danger of self inflammation exists on contact with air humidity or with small amounts of water or at temperatures above 100 °C.
- **Danger of explosion:** Not determined.
- **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.
- **Solubility in / Miscibility with water at 20 °C:** 225 g/l
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
- **Dynamic:** Not applicable.
- **Kinematic:** Not applicable.
- **9.2 Other information** 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:**  
Thermal decomposition forming sulfur and sulfur dioxide.  
Protect from exposure to the light.
- **10.3 Possibility of hazardous reactions**  
Contact with acids liberates toxic gas.  
Reacts with acids releasing sulphur dioxide.  
With little water, decomposition with considerable heat (risk of spontaneous combustion), with the temperature rising to 300 °C within a few hours.  
Reacts with oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** humidity, acids, oxidising agents
- **10.6 Hazardous decomposition products:** Sulphur oxides (SO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**  
Harmful if swallowed.

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**- LD/LC50 values relevant for classification:****7775-14-6 sodium dithionite**

Oral	LD50	2500 mg/kg (rat) (OECD 401)
Dermal	LD50	>2000 mg/kg (rat) (OECD 402)
Inhalative	LC50/4 h	>5,5 mg/l (rat) (OECD 403)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Slight irritant effect - does not require labelling
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:** Sulfur dioxide formed by decomposition is toxic and irritating.
- **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:****7775-14-6 sodium dithionite**

LC50/96 h	62,3 mg/l (Leuciscus idus melanotus) (DIN 38415, Part 15)
EC50/48 h	98,3 mg/l (DA)
IC50/72 h	206 mg/l (Desmodesmus subspicatus) (DIN 38412, Part 9)

- **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.
- **Ecotoxicological effects:**
- **Remark:**  
Toxic to aquatic life 50-100 mg/l. With the formation of sulphur dioxide, sulphuric acid is produced. 1 mg/l lethal to fish.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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** Disposal must be made according to official regulations.

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA**
- **14.2 UN proper shipping name**
- **ADR**
- **IMDG, IATA**
- **14.3 Transport hazard class(es)**
- **ADR**

UN1384

1384 SODIUM DITHIONITE (SODIUM  
HYDROSULPHITE)  
SODIUM DITHIONITE (SODIUM HYDROSULPHITE)



- **Class**
- **Label**

4.2 (S4) Substances liable to spontaneous combustion.  
4.2

- **IMDG, IATA**



- **Class**
- **Label**
- **14.4 Packing group**
- **ADR, IMDG, IATA**
- **14.5 Environmental hazards:**
- **14.6 Special precautions for user**
- **Danger code (Kemler):**
- **EMS Number:**
- **Stowage Category**
- **Handling Code**
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

4.2 Substances liable to spontaneous combustion.  
4.2

II  
Not applicable.  
Warning: Substances liable to spontaneous combustion.  
40  
F-A,S-J  
E  
H1 Keep as dry as reasonably practicable  
Not applicable.

- **Transport/Additional information:**

- **ADR**
- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**
- **Transport category**
- **Tunnel restriction code**

0  
Code: E2  
Maximum net quantity per inner packaging: 30 g  
Maximum net quantity per outer packaging: 500 g  
2  
D/E

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- IMDG

**- Limited quantities (LO)**

- **Excepted quantities (EQ)**

O

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

**- UN "Model Regulation":**

UN 1384 SODIUM DITHIONITE (SODIUM HYDROSULPHITE), 4.2, II

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

- **National regulations:**

**- Information about limitation of use:** Employment restrictions concerning juveniles must be observed.

**- Breakdown regulations:**

Critical quantity values according to the regulations on accidents should be adhered to.

- **Waterhazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

**- 15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

**- 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

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Self-heat. 1: Self-heating substances and mixtures – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- \* Data compared to the previous version altered.