

## SAFETY DATA SHEET

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Die in diesem Produktdatenblatt genannten Spezifikationen dienen nur zur Produktbeschreibung und beziehen sich auf den Zeitpunkt unmittelbar nach der Produktion bzw. Import des Produktes. Sie entsprechen den Angaben des Herstellers. Eine rechtsverbindliche Zusicherung bestimmter Eigenschaften oder der Eignung für einen bestimmten Einsatzzweck kann hieraus nicht abgeleitet werden. Durch unsachgemäßen Transport und / oder unsachgemäße Lagerung können sich Änderungen ergeben. Die Angaben in diesem Produktdatenblatt entbinden den Verarbeiter nicht von eigener Prüfung der Eigenschaften des Produktes und dessen Eignung für die vorgesehene Verwendung.

Trade name: Eisenoxidbraun dunkel

Print date: 16.04.20

Version: 4 / DE

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Replaces Version: 3 / DE

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

### 1.1. Product identifier

Eisenoxidbraun dunkel

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### Use of the substance/preparation

Colourant

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

#### Adresse:

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1.4 Notfall-Nummer: +49 (0) 9723 9350-0 (Mo. – Fr. 7:30 – 15:00 Uhr)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Voluntary product information following the Safety Data Sheet format

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

### 2.2. Label elements

#### Labelling according to regulation (EC) No 1272/2008

The product does not require a hazard warning label in accordance with Regulation (EC) No 1272/2008.

### 2.3. Other hazards

Dust loading

## SECTION 3: Composition/information on ingredients

### Chemical characterization

pigment mixture, inorganic construction

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In case of persistent symptoms consult doctor.

#### After inhalation

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

#### After skin contact

Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

#### After ingestion

Rinse mouth thoroughly with water. Call in a physician immediately and show him the Safety Data Sheet.

#### Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

### 4.2. Most important symptoms and effects, both acute and delayed

Until now no symptoms known so far.

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#### 4.3. Indication of any immediate medical attention and special treatment needed

##### Hints for the physician / treatment

Treat symptomatically

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Water spray jet, Foam, Carbon dioxide, Dry powder

##### Non suitable extinguishing media

Full water jet

#### 5.2. Special hazards arising from the substance or mixture

Metal oxides

#### 5.3. Advice for firefighters

##### Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full protective suit.

##### Other information

Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not inhale dust. Use breathing apparatus if exposed to vapours/dust/aerosol. Ensure adequate ventilation. High risk of slipping due to leakage/spillage of product. Use personal protective clothing. Refer to protective measures listed in Sections 7 and 8. Remove persons to safety.

#### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water.

#### 6.3. Methods and material for containment and cleaning up

Avoid raising dust. Pick up mechanically. When picked up, treat material as prescribed under Section 13 "Disposal".

#### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advice on safe handling

Provide exhaust ventilation if dust is formed. Avoid the formation and deposition of dust. Handle and open container with care. Provide suitable exhaust ventilation at the processing machines. Ensure adequate ventilation. Use breathing apparatus when transferring large quantities without exhaust ventilation facilities. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Observe the usual precautions for handling chemicals.

##### Advice on protection against fire and explosion

Avoid dust formation.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Hints on storage assembly

Do not store together with foodstuffs.

##### Storage class according to TRGS 510

Storage class according to TRGS 13 Non- combustible solids  
510

##### Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from direct sunlight. Protect from extreme heat and cold.

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## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Other information

The national general dust limit must be observed.  
TRGS 900: Observe the general dust threshold.

#### Derived No/Minimal Effect Levels (DNEL/DMEL)

##### Diiron trioxide

Reference substance	Diiron trioxide	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10	mg/m <sup>3</sup>
Source	Literature value	

	Diiron trioxide	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	10	mg/m <sup>3</sup>
Source	Literature value	

##### Triiron tetraoxide

Reference substance	Triiron tetraoxide	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	10	mg/m <sup>3</sup>
Source	Literature value	

	Triiron tetraoxide	
Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	10	mg/m <sup>3</sup>
Source	Literature value	

### 8.2. Exposure controls

#### General protective and hygiene measures

Do not inhale dust/fumes/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Use barrier skin cream. Observe the usual precautions for handling chemicals. Take off immediately all contaminated clothing.

#### Respiratory protection

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Short term: filter apparatus, Filter P1; Use breathing apparatus in dust-laden atmosphere.

#### Hand protection

Protective gloves  
Observe the information of the glove manufacturers on permeability and breakthrough times and other workplace requirements.

#### Eye protection

Safety glasses with side protection shield

#### Body protection

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Clothing as usual in the chemical industry.

**SECTION 9: Physical and chemical properties**

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

<b>Form</b>	Powder		
<b>Colour</b>	see tradename		
<b>Odour</b>	characteristic		
<b>Odour threshold</b>			
Remarks	not determined		
<b>pH value</b>			
Value	5	to	8
Concentration/H <sub>2</sub> O	5	%	
Source	Literature value		
<b>Melting point</b>			
Value	> 1000		°C
Method	Value taken from the literature		
<b>Freezing point</b>			
Remarks	not determined		
<b>Initial boiling point and boiling range</b>			
Remarks	not determined		
<b>Flash point</b>			
Remarks	Not applicable		
<b>Evaporation rate (ether = 1) :</b>			
Remarks	not determined		
<b>Flammability (solid, gas)</b>			
Remarks	not determined		
<b>Upper/lower flammability or explosive limits</b>			
Remarks	not determined		
<b>Vapour pressure</b>			
Remarks	not determined		
<b>Vapour density</b>			
Remarks	not determined		
<b>Density</b>			
Value	4,7		kg/l
Temperature	20	°C	
Source	Literature value		
<b>Solubility in water</b>			
Remarks	insoluble		
Source	Literature value		
<b>Solubility(ies)</b>			
Remarks	not determined		
<b>Partition coefficient: n-octanol/water</b>			
Remarks	not determined		
<b>Ignition temperature</b>			
Remarks	not determined		
<b>Decomposition temperature</b>			
Remarks	not determined		
<b>Viscosity</b>			
Remarks	Not applicable		
<b>Explosive properties</b>			
evaluation	not determined		
<b>Oxidising properties</b>			
Remarks	not determined		

**9.2. Other information**

**Other information**  
None known

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

### 10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

### 10.3. Possibility of hazardous reactions

Stable under recommended storage and handling conditions (see section 7).

### 10.4. Conditions to avoid

At temperatures above 80 °C the product may become unstable and oxidise. This generates additional heat which, under unfavourable conditions, may result in the combustion of flammable materials. The product should therefore not be stored near heat sources.

### Decomposition temperature

Remarks not determined

### 10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

### 10.6. Hazardous decomposition products

No hazardous reactions when stored and handled according to prescribed instructions.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute oral toxicity

Species	rat	
LD50	> 5000	mg/kg
Remarks	Test conducted with a similar formulation.	
Source	Literature value	

#### Skin corrosion/irritation

evaluation	non-irritant
Remarks	Test conducted with a similar formulation.
Source	Literature value
Remarks	Frequent persistent contact with the skin can cause skin irritation.

#### Serious eye damage/irritation

evaluation	non-irritant
Remarks	Test conducted with a similar formulation.
Source	Literature value
Remarks	Contact of the product with skin or eyes may cause irritation.

#### Sensitization

Remarks Based on available data, the classification criteria are not met.

#### Subacute, subchronic, chronic toxicity

Remarks	not determined
Remarks	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

#### Mutagenicity

Remarks Based on available data, the classification criteria are not met.

#### Reproductive toxicity

Remarks Based on available data, the classification criteria are not met.

#### Carcinogenicity

Remarks Based on available data, the classification criteria are not met.

#### Specific Target Organ Toxicity (STOT)

Remarks Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Fish toxicity

Species golden orfe (*Leuciscus idus*)

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LC50 > 1000 mg/l  
Duration of exposure 48 h  
Source Literature value

### Daphnia toxicity

Remarks No data available

### Bacteria toxicity

Remarks No data available

## 12.2. Persistence and degradability

### General information

No data available

## 12.3. Bioaccumulative potential

### General information

No data available

### Partition coefficient: n-octanol/water

Remarks not determined

## 12.4. Mobility in soil

### General information

No data available

## 12.5. Results of PBT and vPvB assessment

### General information

Not applicable

### Evaluation of persistence and bioaccumulation potential

The product does not contain components in concentrations of 0.1% or higher, which are either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

## 12.6. Other adverse effects

### General information

No data available

### General information / ecology

Ecological data are not available. Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations for the product

Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities.

#### Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.  
Uncontaminated packaging may be taken for recycling.

## SECTION 14: Transport information

### Land transport ADR/RID

The product does not constitute a hazardous substance in land transport.

### Marine transport IMDG/GGVSee

The product does not constitute a hazardous substance in sea transport.

### Air transport ICAO/IATA

The product does not constitute a hazardous substance in air transport.

## SECTION 15: Regulatory information \*\*\*

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Water Hazard Class (Germany) \*\*\*

Water Hazard Class (Germany) Not water hazardous

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Remarks

Derivation of WGK according to Annex 1 No. 5.2 AwSV

**Other information**

All components are contained in the TSCA inventory or exempted.

**15.2. Chemical safety assessment**

not applicable

**SECTION 16: Other information**

**Abbreviations**

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

AGW: Arbeitsplatzgrenzwert

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances that are hazardous to water)

BGW: Biologischer Grenzwert

CAS: Chemical Abstracts Service

DNEL: Derived no effect level

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

GGVSee: Gefahrgutverordnung See

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods

LC: Lethal concentration

LD: Lethal dose

MAK: Maximale Arbeitsplatz-Konzentration

NOEC: No observable effect concentration

NOEL: No observable effect level

OECD: Organisation for Economic Co-operation and Development

OEL: Occupational exposure limit

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted no effect concentration

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

TRGS: Technische Regeln für Gefahrstoffe

VDI: Verein Deutscher Ingenieure

VLEP: Valeurs Limites d'exposition Professionnelle

vPvB: Very persistent and very bioaccumulative

WGK: Wassergefährdungsklasse (water hazard class)

**Supplemental information**

These data is based on our present knowledge and experience respectively supplier-information. This safety data sheet describes the product in regard to the requirements of safety. The information does not represent a assurance for certain properties. Existing laws and regulations are to be observed by the recipient of our products in own responsibility. It is the responsibility of the user, to determine if the product is suitable for the deliberate operational area and the respective intended purpose. A liability for damages in connection with the use of this information is excluded. Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\*