

## SAFETY DATA SHEET

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Trade name: Chromoxidgrün stumpf

Print date: 16.04.20

Version: 5 / DE

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Replaces Version: 4 / DE

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

### 1.1. Product identifier

Chromoxidgrün stumpf

#### Registration no.

EC No.: 215-160-9  
Registration no. 01-2119433951-39-XXXX  
CAS No. 1308-38-9

### 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:

Deffner & Johann GmbH  
Mühlackerstraße 13  
D-97520 Rödthlein  
Tel.: +49 (0) 9723 9350-0  
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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

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

### 2.2. Label elements

Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

#### Supplemental information

EUH210 Safety data sheet available on request.

### 2.3. Other hazards

Dust loading

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

#### Chemical characterization

Cr2O3, CAS: 1308-38-9; EG: 2015-160-9, REACH No. 01-2119433951-39-XXXX

#### Further ingredients

##### Chromium(III)-oxide

CAS No.	1308-38-9
EINECS no.	215-160-9
Registration no.	01-2119433951-39-XXXX
Concentration	>= 90 <= 100 % [5]

#### Note

[5] Substance with EU occupational exposure limits

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In case of persistent symptoms consult doctor.

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**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.

**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

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chemicals.

**Advice on protection against fire and explosion**

No special measures required.

**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.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limit values****Chromium(III)-oxide**List TRGS 900  
Type AGW DE, eintembare Fraktion  
Value 2 mg/m<sup>3</sup>

Maximum limit value: 1(l); Status: 05/2018; Remarks: eintembare Fraktion (E), anorganische Chrom(III)-Verbindungen, Grenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls (10), EU

**Chromium(III)-oxide**List 2006/15/EC  
Type Indicative Occupational Exposure Limit (EU)  
Value 2 mg/m<sup>3</sup>

Remarks: Inorganic chromium (III) compounds (insoluble)

**Other information**

The national general dust limit must be observed.

TRGS 900: Observe the general dust threshold.

**Derived No/Minimal Effect Levels (DNEL/DMEL)****Chromium(III)-oxide**Reference substance Chromium(III)-oxide  
Type of value Derived No Effect Level (DNEL)  
Reference group Worker  
Duration of exposure Short term  
Route of exposure inhalative  
Mode of action Local effects  
Concentration 2 mg/m<sup>3</sup>  
Source Literature valueType of value Chromium(III)-oxide  
Derived No Effect Level (DNEL)  
Reference group Worker  
Duration of exposure Long term  
Route of exposure inhalative  
Mode of action Local effects  
Concentration 0,5 mg/m<sup>3</sup>  
Source Literature valueType of value Chromium(III)-oxide  
Derived No Effect Level (DNEL)  
Reference group Consumer  
Duration of exposure Long term  
Route of exposure inhalative  
Mode of action Local effects  
Concentration 0,5 mg/m<sup>3</sup>  
Source Literature value

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**Predicted No Effect Concentration (PNEC)****Chromium(III)-oxide**

Reference substance	Chromium(III)-oxide		
Type of value	PNEC		
Type	Soil		
Concentration	3,2		mg/kg dry weight
Source	Literature value		
Type of value	Chromium(III)-oxide		
Type	PNEC		
Type	Marine sediment		
Concentration	1,31		mg/kg dry weight
Source	Literature value		
Type of value	Chromium(III)-oxide		
Type	PNEC		
Type	Marine		
Concentration	0,0047		mg/l
Source	Literature value		
Type of value	Chromium(III)-oxide		
Type	PNEC		
Type	Freshwater sediment		
Concentration	18,2		mg/kg dry weight
Source	Literature value		
Type of value	Chromium(III)-oxide		
Type	PNEC		
Type	Freshwater		
Concentration	0,0047		mg/l
Source	Literature value		
Type	Chromium(III)-oxide		
Concentration	Sewage treatment plant (STP)		
Source	10		mg/l
Source	Literature value		
Conditions	Intermittend		
Concentration		to	0,0047 mg/l
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. Particle filter half mask, 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**

Clothing as usual in the chemical industry.

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**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	appr. 5 to 7
Concentration/H <sub>2</sub> O	5 %
Method	Value taken from the literature
<b>Melting point</b>	
Value	2435 °C
Method	Value taken from the literature
<b>Freezing point</b>	
Remarks	not determined
<b>Initial boiling point and boiling range</b>	
Value	4000 °C
Pressure	1013 hPa
Method	Value taken from the literature
<b>Flash point</b>	
Remarks	Not applicable
<b>Evaporation rate (ether = 1) :</b>	
Remarks	not determined
<b>Flammability (solid, gas)</b>	
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	5,2 kg/l
Temperature	20 °C
Method	Value taken from the literature
<b>Solubility in water</b>	
Remarks	virtually insoluble
<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**

No hazardous reactions known.

**10.3. Possibility of hazardous reactions**

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

**10.4. Conditions to avoid**

No hazardous reactions known.

**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**

Reference substance	Chromium(III)-oxide	
Species	rat	
LD50	> 5000	mg/kg
Method	OECD 401	
Source	Literature value	

**Acute inhalational toxicity**

Reference substance	Chromium(III)-oxide	
Species	rat	
LC50	> 5,41	mg/l
Duration of exposure	4	h
Method	OECD 403	
Source	Literature value	

**Skin corrosion/irritation**

Reference substance	Chromium(III)-oxide
Species	rabbit
evaluation	non-irritant
Method	OECD 404
Remarks	Based on available data, the classification criteria are not met.
Source	Literature value

**Serious eye damage/irritation**

Reference substance	Chromium(III)-oxide
evaluation	non-irritant
Method	Value taken from the literature
Remarks	Eye contact with the product may lead to irritation.
Reference substance	Chromium(III)-oxide
Species	rabbit
evaluation	non-irritant
Method	OECD 405
Remarks	Based on available data, the classification criteria are not met.
Source	Literature value

**Sensitization**

Reference substance	Chromium(III)-oxide
Route of exposure	dermal
Species	guinea pig
evaluation	non-sensitizing
Method	OECD 406

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Remarks	Based on available data, the classification criteria are not met.		
Source	Literature value		
<b>Subacute, subchronic, chronic toxicity</b>			
Remarks	Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.		
Reference substance	Chromium(III)-oxide		
Sub-chronic toxicity			
Route of exposure	oral		
Species	Rats (male/female)		
NOAEL	2000		mg/kg/d
Duration of exposure	90	Days	
Method	OECD 408		
Source	Literature value		
Source	5 days / week		
Reference substance	Chromium(III)-oxide		
Sub-chronic toxicity			
Route of exposure	inhalative		
Species	Rats (male/female)		
LOAEL	4,4		mg/m³
Duration of exposure	65	d	
Method	OECD 413		
Source	Literature value		
Source	5 days / week		
<b>Mutagenicity</b>			
evaluation	Not considered mutagenic based on several in vitro and in vivo studies.		
Source	Literature value		
<b>Reproductive toxicity</b>			
Remarks	Based on available data, the classification criteria are not met.		
<b>Carcinogenicity</b>			
Species	Rats (male/female)		
Duration of exposure	2	y	
Remarks	Based on available data, the classification criteria are not met.		
Source	Literature value		
Source	5 days / week		
<b>Specific Target Organ Toxicity (STOT)</b>			
Remarks	Based on available data, the classification criteria are not met.		
<b>Aspiration hazard</b>			
Based on available data, the classification criteria are not met.			

**SECTION 12: Ecological information \*\*\*****12.1. Toxicity****Fish toxicity \*\*\***

Species	zebra fish (Brachydanio rerio)		
LC50	> 10000		mg/l
Duration of exposure	96	h	
Method	ISO 7346		
Source	Literature value		
Source	ISO 7346-1; freshwater		
Species	zebra fish (Brachydanio rerio)		
NOEC	10000		mg/l
Duration of exposure	30	d	
Method	OECD 210		
Source	Literature value		
Source	Freshwater, chronic		

**Daphnia toxicity**

Remarks No data available

**Bacteria toxicity**

Reference substance	Chromium(III)-oxide		
Species	activated sludge		
EC50	> 10000		mg/l
Duration of exposure	3	h	



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Source

Literature value

Source

ISO 8192

## 12.2. Persistence and degradability

### General information

No data available

### Biodegradability

Remarks

not determined

## 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

Identification number

806

Remarks

Derivation of WGK according to Annex 1 No. 5.2 AwSV

### 15.2. Chemical safety assessment

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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: \*\*\*