

SAFETY DATA SHEET

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Trade name: Chromoxidgrün stumpf

Print date: 16.04.20

Version: 5 / DE

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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:

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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, einatembare Fraktion
Value 2 mg/m³

Maximum limit value: 1(I); Status: 05/2018; Remarks: einatembare 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/m³

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/m³
Source Literature value

Type 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/m³
Source Literature value

Type 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/m³
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		
Type	Sewage treatment plant (STP)		
Concentration	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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Powder		
Colour	see tradename		
Odour	characteristic		
Odour threshold			
Remarks	not determined		
pH value			
Value	appr. 5	to 7	
Concentration/H ₂ O	5	%	
Method	Value taken from the literature		
Melting point			
Value	2435		°C
Method	Value taken from the literature		
Freezing point			
Remarks	not determined		
Initial boiling point and boiling range			
Value	4000		°C
Pressure	1013	hPa	
Method	Value taken from the literature		
Flash point			
Remarks	Not applicable		
Evaporation rate (ether = 1) :			
Remarks	not determined		
Flammability (solid, gas)			
Remarks	not determined		
Upper/lower flammability or explosive limits			
Remarks	not determined		
Vapour pressure			
Remarks	not determined		
Vapour density			
Remarks	not determined		
Density			
Value	5,2		kg/l
Temperature	20	°C	
Method	Value taken from the literature		
Solubility in water			
Remarks	virtually insoluble		
Solubility(ies)			
Remarks	not determined		
Partition coefficient: n-octanol/water			
Remarks	not determined		
Ignition temperature			
Remarks	not determined		
Decomposition temperature			
Remarks	not determined		
Viscosity			
Remarks	Not applicable		
Explosive properties			
evaluation	not determined		
Oxidising properties			
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		
Subacute, subchronic, chronic toxicity			
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/m ³
Duration of exposure	65	d	
Method	OECD 413		
Source	Literature value		
Source	5 days / week		
Mutagenicity			
evaluation	Not considered mutagenic based on several in vitro and in vivo studies.		
Source	Literature value		
Reproductive toxicity			
Remarks	Based on available data, the classification criteria are not met.		
Carcinogenicity			
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		
Specific Target Organ Toxicity (STOT)			
Remarks	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

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: ***