

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 1

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Chrome Oxide Green

Article No.: 44200

UFI: --

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Coloring agent (pigment and dyes), inorganic.

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG

Address: Hauptstr. 41-47, 88317 Aichstetten, Germany

Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606

Internet: www.kremer-pigmente.com

E-Mail: info@kremer-pigmente.com

Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

No classification required according to the CLP/GHS guidelines.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

Substance

next page: 2

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 2

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

3.1.

3.2. Mixture

Chemical Characterization: Chromium(III)-oxide (Cr₂O₃), Pigment Green 17, C.I. 77288

Information on Components / Hazardous Ingredients:

Chromium(III) oxide; REACH Reg. No. 01-2119433951-39-xxxx	90 - 100 %	CAS-Nr: 1308-38-9 EINECS-Nr: 215-160-9 EC-Nr:
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air. If required give artificial respiration. Keep patient warm.

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

If breathing is difficult call a physician.

After skin contact:

Wash off with water.

After eye contact:

Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.

After ingestion:

No special measures required.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

Treat symptomatically.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Water mist, extinguishing powder, foam, carbon dioxide.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

next page: 3

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 3

Revised edition: 01.06.2021

Version: 2.0

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*Product is not flammable.
No special hazards.*

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Ensure adequate ventilation.
Wear protective clothing.
Floor may be slippery; use care to avoid falling.*

6.2. Environmental Precautions

Environmental precautions:

Contact local authorities if product pollutes soil or vegetation.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Take up mechanically and collect in suitable containers for disposal. Avoid dust formation.

6.4. Reference to other Sections

*Protective clothing, see Section 8.
Dispose of contaminated material according to Section 13.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Provide adequate ventilation.
Wear adequate protective clothing (see para. 8).*

Hygienic measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

*Store in tightly sealed containers in a cool and well ventilated location.
Protect product from direct sunlight.*

Requirements for storage areas and containers:

Store the product in the original container.

Information on fire and explosion protection:

Electrical installations / working materials must comply with the technological safety standards.

next page: 4

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 4

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

Storage class:

13; Non combustible solids (TRGS 510)

Further Information:

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900, AGW:

Chrom-III-oxide (based on Cr), CAS 1308-38-9, TWA: 2 mg/m³ (inhalable dust fraction)

Average value: 2 mg/m³ (8h) inhalable fraction.

Short term value: 2 mg/m³ (15 min) inhalable fraction.

Parameters to be controlled:

Chromium(III) oxide: TWA (GB EH40): 0.5 mg/m³ (Cr); VLEP (IT): 0.5 mg/m³ (8h); OEL (EU): 2 mg/m³; TLV-ACGIH: 0.5 mg/m³ (8h)

Derived No-Effect Level (DNEL):

Chromium(III) oxide:

0.5 mg/m³ (worker/consumer, inhalation, long-term exposure - local effects)

2 mg/m³ (worker, inhalation, short-term exposure - local effects)

Predicted No-Effect Concentration (PNEC):

Chromium(III) oxide:

Fresh water / Sea water: 0.0047 mg/l

Fresh water sediment: 18.2 mg/kg dw

Sea water sediment: 1.31 mg/kg dw

Sewage treatment system (STP): 10 mg/l

Soil: 3.2 mg/kg dw

Additional Information:

8.2. Exposure Controls

Technical protective measures:

While working with the product, the air at the work station has to be controlled and the exposed person observed.

Facilities storing or utilizing this material should be equipped with an eyewash and shower facility.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.

Wash contaminated clothes before reuse.

Respiratory protection:

Dust mask recommended when very dusty (with particle filter P1).

Hand protection:

next page: 5

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 5

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

Protective gloves (EN 374)

Protective glove material:

Leather gloves (< 60 min)

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: green

Odor: odorless

Odor threshold:
no information available

pH-Value: 5 - 7 (50 g/l H₂O)

Melting temperature: 2435°C (4415°F)

Boiling temperature: 4000°C (1013 hPa)

Flash point:
not available

Evaporation rate:
No information available.

Flammability (solid, gas):
not available

Upper explosion limit:
no information available

Lower explosion limit:
no information available

Vapor pressure:
not applicable

Vapor density:

Density: 5.2 g/cm³ (20°C)

Solubility in water: insoluble

Coefficient of variation (n-Octanol/Water):
not applicable

Auto-ignition temperature:

next page: 6

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 6

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

No information available.

Decomposition temperature:

No data available.

Viscosity, dynamic:

not applicable

Explosive properties:

not applicable

Oxidizing properties:

no information available

Bulk density:

800 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

The product is stable.

10.3. Possibility of Hazardous Reactions

None if handled and stored according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.

Thermal decomposition:

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008

Acute Toxicity

LD50, oral:

> 5000 mg/kg (rat; OECD 401)

next page: 7

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 7

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

LD50, dermal:

No information available.

LC50, inhalation:

> 5.41 mg/l (4h, rat; OECD 403)

Primary effects

Irritant effect on skin:

Non irritating (rabbit; OECD 404)

Irritant effect on eyes:

Non-irritating to eyes (rabbit; OECD 405)

Inhalation:

No irritant effect known.

Ingestion:

No irritant effect known.

Sensitization:

No sensitizing effect (guinea pig).

Chromium(III) oxide: non sensitizing (guinea pig; OECD 406)

Mutagenicity:

Gentoxizität in vitro: Ames-Test negative (Escherichia coli; OECD 471)

In vivo genetic-toxicity: micronucleus (Mammalian Erythrocyte; OECD 474): negative

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

Negative (rat, m/f; 2 years, Frequency of treatment 5 day/week)

Chromium(III) oxide: negative (rat, m/f; 2 years, Frequency of treatment 5 day/week)

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

LOAEL (Inhalation): 4.4 mg/m³ (65d, 5 days/week, rat (m/w); OECD 413)

Chromium(III) oxide: NOAEL (Oral): 2000 mg/kg (90d, 5 days/week, rat (m/f); OECD 408); OECD 408); LOAEL (Inhalation): 4.4 mg/m³ (65d, 5 days/week, rat (m/w); OECD 413)

Aspiration hazard

No information available.

11. 2. Information on other Hazards

Endocrine Disrupting Properties:

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.

12. Ecological Information

next page: 8

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 8

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

12.1. Aquatic Toxicity

Chromium(III) oxide:

Fish toxicity:

LC50: > 10000 mg/l (96h, Danio rerio)

NOEC: 1000 mg/l (30d; OECD 210)

Daphnia toxicity:

EC50: 14.1 mg/l (48h, Daphnia magna; OECD 202)

NOEC: > 0.02 mg/l (21d, Daphnia magna; OECD 211)

Bacteria toxicity:

EC50: > 10000 mg/l (3h, active sludge)

Algae toxicity:

ErC50: > 0.849 mg/l (72h, Desmodesmus subspicatus; OECD 201)

EC10: 0.0117 mg/l (72h, Desmodesmus subspicatus; OECD 201)

12.2. Persistency and Degradability

Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12.3. Bioaccumulation

Not applicable.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

12.6. Endocrine Disrupting Properties

This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulation (EC) 2018/605.

12.7. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

No special effects or hazards known.

AOX Value:

Product does not contain any organically bound halogens which influence the AOX value of discard water.

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and

next page: 9

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 9

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Non-contaminated packaging may be recycled.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA

14.2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR / DOT (US) (land transportation).

IMDG/IATA:

Not hazardous goods

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14.5. Environmental Hazards

None

14.6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14.7. Maritime Transport in Bulk according to IMO Instruments

not applicable

next page: 10

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



44200 Chrome Oxide Green

Page 10

Revised edition: 01.06.2021

Version: 2.0

Printed: 14.11.2022

14.8. Further Information

15. Regulatory Information

15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

0, not hazardous (according to the German Regulation AwSV)

Local regulations on chemical accidents:

Seveso III Directive: not applicable under Directive 2012/18/EC.

Employment restrictions:

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 72, 47, 28 (Chromium (VI))

Technical instructions on air quality:

15.2. Chemical Safety Assessment

*A Chemical Safety Assessment is not necessary for this product.
REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59): not applicable*

15.3. Further Information

EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable

Regulation (EU) 2019/1021 - Persistent organic pollutants: not regulated / not applicable

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors: not forbidden and/or not restricted

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable

International Chemical Weapons Convention (CWC), list of the toxic chemicals and toxic chemical precursors: not forbidden and/or restricted

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.