

Material Safety Data Sheet

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



44100 Cobalt Green

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Revised edition: 03.03.2016

Version: 2.1

Printed: 30.03.2016

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

1.1. Product Identifier

Product Name: Cobalt Green

Article No.: 44100

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

Identified uses:

Professional use of lead oxides as laboratory agents and in chemical analysis.

Production of ceramic coating suited for firing and decor preparation for glass and ceramic.

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.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

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

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to EC Regulation 1272/2008

Skin sensitization, hazard category 1

Carcinogenicity, hazard category 1A

Specific target organ toxicity (repeated exposure), category 2

H317 May cause an allergic skin reaction.

Cat.: 1

H350i Can cause cancer if inhaled.

Cat.: 1B

H373 May cause damage to organs through prolonged or repeated exposure.

Cat.: 2

Classification according to EC Regulation No. 67/548 or No. 1999/45

Irritating (Xi) R43 May cause sensitization by skin contact.

Harmful (Xn) R48/20 Harmful: Danger of serious damage to health by prolonged exposure.

Toxic (T) R49 May cause cancer by inhalation.

Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

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Classification according to EC
Regulation 1272/2008

Hazard designation:



GHS07



GHS08-2

Signal word:

Danger

Hazard designation:

H317

May cause an allergic skin reaction.

H350i

Can cause cancer if inhaled.

H373

May cause damage to organs through prolonged or repeated exposure.

Safety designation:

P201

Obtain special instructions before use.

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P280

Wear protective gloves/ clothing/ eye/ face protection.

P308+P313

If exposed or concerned: Get medical advice/attention.

P333+P313

If skin irritation or rash occurs: Get medical attention.

P362

Take off contaminated clothing and wash before reuse.

Hazardous components for labelling:

Nickel titanium trioxide

2.3. Other Hazards

Restricted to professional users.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization:

Inorganic pigment, inorganic salt. Pigment Green 50, C.I. 77377
Barium sulphate (CAS No. 7727-43-7, EINECS): 20 - 20 %
Dichromium trioxide (CAS No. 1308-38-9, EINECS 215-160-9; REACH Reg. No. 01-2119433951-39-xxxx): 20 - 25 %
Titanium dioxide (CAS No. 13463-67-7, EINECS 236-675-5; REACH Reg. No. 01-2119489379-17-0000): < 10 %

Hazardous Ingredients:

Barium sulfate (C.I. Pigment White 21)

20 - 25 %

CAS-Nr: 7727-43-7

EINECS-Nr: 231-784-4

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

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General information:

Do not leave affected persons unattended.

Take person away from hazardous area.

After inhalation:

Get medical attention immediately or contact a poison center.

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

After skin contact:

Remove contaminated clothing.

Wash with soap and rinse with plenty of water.

If irritation continues consult a physician.

After eye contact:

Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.

Remove contact lens.

After ingestion:

Rinse mouth with water and drink plenty of water.

Do not give milk or alcohol to drink.

Never give anything by mouth to an unconscious person.

If symptoms persist consult physician.

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

Symptoms:

Can cause allergic reactions.

Inhalation: cause cause cancer.

Prolonged/repeated exposition can damage the organs.

Effects:

No further information available.

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

Treatment:

First-aid measures must be specified together with the responsible physician for industrial medicine.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Product itself does not burn.

Unsuitable extinguishing media:

Water with full jet.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

Do not let extinguishing water enter the sewerage system or water courses.

No thermal decomposition.

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5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

Contaminated extinguishing water and debris should be disposed of according to local regulations.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust, wear protective clothing.

Ensure adequate ventilation.

Do not inhale dust.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

Contact local authorities if product pollutes soil or vegetation.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

Avoid dust formation.

Take up mechanically and collect in suitable containers for disposal.

6.4. Reference to other Sections

Protective clothing, see Section 8.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.

Avoid contact with eyes, skin and clothing.

All persons who suffer from skin sensitization problems, asthma, allergies, chronic or repeated respiratory diseases should not handle or use this product.

Provide adequate ventilation.

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 well ventilated location.

Store locked up.

Requirements for storage areas and containers:

No special measures necessary.

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Information on fire and explosion protection:

Avoid dust formation.

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

Storage class (VCI):

6.1 D: Non combustible, acute toxic cat. 3 / toxic products

Further Information:

Store in a dry place.

7.3. Specific End Use(s)

Further information:

The technical guidelines for the application of this product/mixture should be followed.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Barium sulphate: AGW: 1.25 mg/m³ (airborne); 10 mg/m³ (inhalable); 2(II)

Dichromium trioxide (CAS 1308-38-9): AGW (TRGS 900): 2 mg/m³ (inhalable dust)

Titanium dioxide (CAS 13463-67-7): TLV (TRGS 900): 1.25 mg/m³ (airborne dust), 10 ml/m³ (inhalable dust); 2(II)

Parameters to be controlled:

Dichromium trioxide (CAS 1308-38-9): 2 mg/m³ (TWA)

Derived No-Effect Level (DNEL):

No values available.

Predicted No-Effect Concentration (PNEC):

No values available.

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Technical protective measures have priority to personal protective measures.

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

Provide adequate ventilation in case of dust formation.

Personal Protection

General protective measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and after work.

Respiratory protection:

In case of formation of dust.

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Hand protection:

Protective gloves recommended in case of prolonged or repeated contact.

Protective gloves (EN 374)

Protective glove material:

Nitrile rubber (NBR), polyvinyl chloride (PVC).

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Safety shoes.

Environmental precautions:

No special measures required.

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:
not determined

Melting temperature:
not available

Boiling temperature:
not applicable

Flash point:
not applicable

Evaporation rate:
not applicable

Flammability (solid, gas):
not available

Upper explosion limit:
no information available

Lower explosion limit:
no information available

Vapor pressure:
not applicable

Vapor density:
No information available.

Density:

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Solubility in water: *No data available*

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

Auto-ignition temperature:
No information available.

Decomposition temperature:
No data available.

Viscosity, dynamic:
not applicable

Explosive properties:
not applicable

Oxidizing properties:
No information available.

Bulk density:
not determined

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

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if handled and stored according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

No information available.

Thermal decomposition:

No further information available.

10.5. Incompatible Materials

No information available.

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10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

Barium sulphate: 500 mg/kg (conversion value)

LD50, dermal:

No information available.

LC50, inhalation:

No information available.

Primary effects

Irritant effect on skin:

Irritant effect possible.

Prolonged skin contact may defat the skin and produce dermatitis.

Irritant effect on eyes:

Dust may irritate eyes.

Inhalation:

Dust can cause irritation of the respiratory system.

Ingestion:

No information available

Sensitization:

May cause allergic skin reactions.

Mutagenicity:

No data available.

Reproductive toxicity:

No data available.

Cancerogenity:

No data available.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: no information available.

Repeated exposure: can damage the organs after repeated or prolonged exposure..

Additional toxicological information:

Aspiration hazard: not applicable

12. Ecological Information

12.1. Aquatic Toxicity

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Fish toxicity:

Dichromium trioxide (1308-38-9): LC50: > 100 mg/l (96h)

Titanium dioxide (13463-67-7): LC50: > 100 mg/l (96h)

Daphnia toxicity:

No information available.

Bacteria toxicity:

No data available.

Algae toxicity:

12. 2. Persistency and Degradability

No information available.

12. 3. Bioaccumulation

No information available.

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 and PBT or vPvB in percentage greater than 0.1 %.

12. 6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

No data available.

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

*Dispose of according to official national and local regulations.
Do not let product enter water systems.*

European Waste Code (EWC):

Uncleaned packaging:

Packaging may be disposed of in the same manner as the product.

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 (land transportation).

IMDG/IATA:

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No hazardous goods according to IMDG.

14. 3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel no.:

IMDG Class (sea):

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. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

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

Local regulations on chemical accidents:

Seveso III: does not apply

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: forbidden and/or restricted (Nickel-Titanium trioxide)

Technical instructions on air quality:

Classification II: 56 % inorganic dust.

Classification III: 20 % inorganic dust.

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Classification II: 2.75 % Carcinogenic substances

15. 2. Chemical Safety Assessment

*A Chemical Safety Assessment is not necessary for this product.
EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)*

15. 3. Further Information

*International Chemical Weapons Convention (CWC), list of the toxic chemicals and toxic chemical precursors: not forbidden and/or restricted
Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable
Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable
EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable
Regulation (EC) 850/2004 - Persistent organic pollutants and amending Directive 79/117/EEC: not regulated / not applicable
Listed in:
REACH (EU), TSCA (US), AICS (AUS), DSL (CA), KECI (KR), INV (CH), NZIoC (NZ)*

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.