

Safety Data Sheet

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



44101 Cobalt Green, PG 50

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Revised edition: 20.02.2018

Version: 5

Printed: 09.12.2019

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

1.1. Product Identifier

Product Name: Cobalt Green, PG 50

Article No.: 44101

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

Identified uses:

Coloring agent

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

3.1. Substance

Mixture

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3.2.

Chemical Characterization: Pigment Green 50, C.I. 77377

Information on Components / Hazardous Ingredients:

Cobalt titanate green spinel; REACH Reg. No. 01-2119957311-42-0003	100 %	CAS-Nr: 68186-85-6 EINECS-Nr: 269-047-4 EC-Nr:
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Additional information:

This product is made by means of a high temperature calcination of individual components. Due to its unique crystalline structure, the properties of this product must not correspond to those of the individual metals and oxides.

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

In case of an accident or if you feel unwell, seek medical advice immediately (show the label where possible).

After inhalation:

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

*Oxygen therapy in case of impaired breathing.
If breathing is difficult call a physician.*

After skin contact:

*Wash with soap and rinse with plenty of water.
If symptoms persist, consult a physician.*

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Consult physician.*

After ingestion:

Rinse mouth with water and give plenty of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.

Do not induce vomiting.

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

Symptoms:

Irritates eyes, skin and respiratory system.

Effects:

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

Treatment:

No further information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

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Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

The product is not flammable.

5.3. Advice for Firefighters

Protective equipment:

Wear suitable protective clothing.

Further information:

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.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

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.
See Section 13 for information on disposal.*

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

*Avoid formation of dust. Do not inhale dust.
Provide adequate ventilation.*

Hygienic measures:

*Do not eat or drink during work. Do not smoke.
Wash thoroughly after handling.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store the product in the original tightly sealed containers in a dry and cool place.

Requirements for storage areas and containers:

Store product in closed containers.

Information on fire and explosion

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protection:

Storage class:

Further Information:

7.3. Specific End Use(s)

No detailed information on use is given, as no exposure scenarios according to Article 14.4 Regulation (EC) 1907/2006 are required.

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

none known

Parameters to be controlled:

Cobalt metal, dust and fumes (as Co)

TWA (Portugal): 0.02 mg/m³

Nickel, Metal and insoluble compounds (as Ni): TWA 1.5 mg/m³; 22 - 30 %

Zinc Compounds (as Zn): 12 - 20 %

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

Biological limit value (TRGS 903):

Cobalt: FR: 15 µg/l (urine), 1 µg/l (blood); HU: 0.03 mg/g (creatinine in urine), 0.058 µmol/mmol (creatinine in urine); ES: 15 µg/l (urine), 1 µg/l (Blut); CH: 30 µg/l (urine)

Cobalt metal, dust and fumes: FR: 15 µg/l (urine), 1 µg/l (blood); HU: 0.03 mg/g (creatinine in urine); ES: 15 µg/l (urine), 1 µg/l (Blut); CH: 30 µg/l (urine)

Nickel: FI: 0.1 µmol/l (urine); HU: 0.02 mg/g (creatinine in urine); CH: 45 µg/l (urine)

Nickel, Metal, and insoluble compounds (als Ni): Ungarn: 0.02 mg/g, 0.038 µmol/mmol (creatinine in urine); CH: 45 µg/l (urine)

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 facility.

Personal Protection

General protective measures:

Do not inhale dust. Do not eat, drink or smoke while working. Wash hands before breaks and at the end of work.

Respiratory protection:

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

Hand protection:

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Protective gloves

Protective glove material:

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

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Safety shoes.

Environmental precautions:

Avoid spilling and release of product. Follow the national emission regulations.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: green

Odor: none

Odor threshold:
No information available.

pH-Value:
not available

Melting temperature:
not applicable

Boiling temperature:
not applicable

Flash point:
not applicable

Evaporation rate:
not applicable

Flammability (solid, gas):
not applicable

Upper explosion limit:
no information available

Lower explosion limit:
no information available

Vapor pressure:
not applicable

Vapor density:
No information available.

Density:

Solubility in water: No data available

Coefficient of variation (n-

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Octanol/Water):

not applicable

Auto-ignition temperature:

not applicable

Decomposition temperature:

not applicable

Viscosity, dynamic:

not available

Explosive properties:

not applicable

Oxidizing properties:

none

Bulk density:

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size:

Other information:

10. Stability and Reactivity

10.1. Reactivity

No information available.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid formation of dust.

Thermal decomposition:

10.5. Incompatible Materials

None known.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

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Acute Toxicity

LD50, oral:

Cobalt titanium green spinel > 10000 mg/kg

LD50, dermal:

No information available.

LC50, inhalation:

No information available.

Primary effects

Irritant effect on skin:

Dust may cause irritation.

Irritant effect on eyes:

Dust may irritate eyes.

Inhalation:

Can cause irritation of the respiratory system.

Ingestion:

Not classified as harmful.

Sensitization:

No sensitizing effects known.

Mutagenicity:

No mutagenic effects known.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

Repeated exposure can cause irritation of the eyes, skin and respiratory tract.

12. Ecological Information

12.1. Aquatic Toxicity

Not expected to be hazardous for aqueous organisms.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12.2. Persistency and Degradability

The product is not likely to be biodegradable.

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12.3. Bioaccumulation

The product does not contain any components which are likely to bioaccumulate.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

Not applicable.

12.6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

There are no data available on the product itself.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

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:

No hazardous goods according to IMDG.

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

Hazard no.:

EmS No.:

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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 (German Regulation)

Local regulations on chemical accidents:

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: not applicable

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

No information available.

15. 3. Further Information

Listed in the following inventories:

EINECS (269-047-4), TSCA (US), AICS (AUS), DSL/NDL (CA), ENCS (JP), ECL (KR), PICCS (PH), NZIoC (NZ), IECSC (CN)

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

Regulation (EC) 850/2004 - Persistent organic pollutants and amending Directive 79/117/EEC: 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

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal

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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.