

Safety Data Sheet

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



44280 Permanent Green

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Revised edition: 09.06.2017

Version: 1

Printed: 13.01.2020

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

1.1. Product Identifier

Product Name: Permanent Green

Article No.: 44280

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)

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

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

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3.2. Mixture

Chemical Characterization:

Mixture of chrome green oxide, calcium carbonate, cobalt aluminate blue spinel (CoAl₂O₄). Mixture of: Pigment Blue 15+28, Pigment Green 7+17, Pigment White 7.

Information on Components / Hazardous Ingredients:

Talc (H332-335)	8 - 9.5 %	CAS-Nr: 14807-96-6 EINECS-Nr: 238-877-9 EC-Nr:
Titanium dioxide; REACH Reg. No. 01-2119489379-17-0016	8 - 9.5 %	CAS-Nr: 13463-67-7 EINECS-Nr: 236-675-5 EC-Nr:
Calcium carbonate (CaCO ₃)	70 - 75 %	CAS-Nr: 471-34-1 EINECS-Nr: 207-439-9 EC-Nr:
Chromium(III) oxide; REACH Reg. No. 01-2119433951-39-xxxx	5 - 6.5 %	CAS-Nr: 1308-38-9 EINECS-Nr: 215-160-9 EC-Nr:
Pigment Green 7, C.I. 74260; REACH Reg. No. 01-2119459333-39-0000	1 - 2 %	CAS-Nr: 1328-53-6 EINECS-Nr: 215-524-7 EC-Nr:
Alkyl aryl sulfonate (H302-319-315)	1 - 2 %	CAS-Nr: EINECS-Nr: EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

No special measures required.

After inhalation:

Supply fresh air and seek medical advice in case of complaints.

After skin contact:

Wash with soap and rinse with plenty of water.

After eye contact:

Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Consult physician.

Seek medical attention if irritation persists.

After ingestion:

Do not induce vomiting. Consult physician immediately.

Never give anything by mouth to an unconscious person.

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

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Symptoms:

No further information available.

Effects:

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No special first-aid measures necessary.

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:

5. 2. Special Hazards arising from the Substance or Mixture

Special hazards:

Do not inhale fumes.

5. 3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

6. Accidental Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust.

6. 2. Environmental Precautions

Environmental precautions:

No special measures required.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Clean up mechanically. Avoid dust formation.

6. 4. Reference to other Sections

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation and deposition of dust. Provide adequate ventilation.

Hygienic measures:

Wash hands at the end of work. Preventive skin protection recommended.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

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Store in a cool and dry place.

Requirements for storage areas and containers:

No special measures necessary.

Information on fire and explosion protection:

Do not store together with: foodstuffs, beverages and feed.

Storage class:

10-13 (TRSG 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):

TLV: 10 mg/m³ inhalable fraction (general dust limit)

Parameters to be controlled:

Talc (CAS 14807-96-6): WEL (GB): 1 mg/m³ (8h; einatembare Fraktion); TLV-ACGIH: 2 mg/m³ (8h)

Titanium dioxide (CAS 13463-67-7): VLEP (IT) 10 mg/m³; WEL (GB): 4 mg/m³; TLV-ACGIH (EU): 10 mg/m³ (inhalable fraction); 5 mg/m³ (airborne fraction)

Calcium carbonate (CAS 471-34-1): AGW (CH): 3 mg/m³ (airborne aerosol)

Calcium carbonate (CAS 471-34-1): TLV-ACGIH (EU): 10 mg/m³ (inhalable fraction); 3 mg/m³ (airborne fraction)

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)

Pigment Green 7 (CAS 1328-53-6); TLV-ACGIH (EU): 10 mg/m³ (8h, inhalable fraction); 3 mg/m³ (8h, airborne fraction)

Derived No-Effect Level (DNEL):

Titanium dioxide:

700 mg/m³ bw/d (consumer, swallowing, short-term exposure - local effects)

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

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)

Pigment Green 7 (1328-53-6):

45 mg/kg bw/day (consumer, swallowing, long-term exposure - systemic effects)

4 mg/m³ (worker, inhalation, long-term exposure - systemic effects)

225 mg/kg bw/day (consumer, skin contact, long-term exposure - systemic effects)

450 mg/kg bw/day (worker, skin contact, long-term exposure -

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systemic effects)

Predicted No-Effect Concentration (PNEC):

Titanium dioxide:

Fresh water: 0.127 mg/l

Seawater: 1 mg/l

Fresh water sediment: 1000 mg/l

Seawater sediment: 100 mg/l

Pigment Green 7 (1328-53-6):

Sewage treatment system (STP): 10000 mg/l

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Provide adequate ventilation.

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:

In case of formation of dust.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: green

Odor: product specific

Odor threshold:

No information available.

pH-Value: 8 (100 g/l H₂O, 20°C)

Melting temperature:

not available

Boiling temperature:

not applicable

Flash point:

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not combustible

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:

4.1 g/cm³ (20°C)

Solubility in water:

insoluble

*Coefficient of variation (n-
Octanol/Water):*

no information available

Auto-ignition temperature:

not applicable

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.

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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.

10.6. Hazardous Decomposition Products

No information available.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

> 2000 mg/kg

Titanium dioxide: > 5000 mg/kg; NOAEL: 3500 mg/kg (rat)

Calcium carbonate: 6450 mg/kg (rat)

Chromium(III) oxide: > 5000 mg/kg (rat)

Pigment 7: > 5000 mg/kg (rat)

Alkyl aryl sulfonate: > 1300 mg/kg (rat)

LD50, dermal:

Pigment Green 7: > 5000 mg/kg (rat)

LC50, inhalation:

Titanium dioxide: > 6.82 mg/kg (4h, rat)

Chromium(III) oxide: > 5.41 mg/l (4h, Ratte; OECD 403)

Primary effects

Irritant effect on skin:

No irritant effect known.

Irritant effect on eyes:

Dust may irritate eyes.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

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No relevant data found.

Mutagenicity:

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:

Acute or chronic effects are not expected.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

Titanium dioxide (13463-67-7): LC50: >1000 mg/l (96h, Pimephales promelas)
Pigment Green 7: LC50: > 100 mg/l (96h, Cyprinus carpio)
Alkyl aryl sulfonate: LC50: 22 mg/l (96h, Pimephales promelas; OECD 203)

Daphnia toxicity:

Titanium dioxide: EC50: >100 mg/l (48, Daphnia magna; OECD 202)
Pigment Green 7: > 500 mg/l (48h, Daphnia magna)
Alkyl aryl sulfonate: 2.5 mg/l (48h, Daphnia magna; OECD 202)

Bacteria toxicity:

No data available.

Algae toxicity:

Titanium dioxide: ErC50: >100 mg/l (72h, Pseudokirchneriella subcapitata); NOEC: 5600 mg/l (Algae)
Pigment Green 7: > 100 mg/l (72h, Desmodemus subspicatus)

12.2. Persistency and Degradability

No information available.

12.3. Bioaccumulation

No information available.

12.4. Mobility

Product is not water soluble.

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.

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Behaviour in sewage systems:

Further ecological effects:

Natural product. Environmentally not hazardous.

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:

Untaminated 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 (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.:

IATA Class:

not applicable

Hazard no.:

14.4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

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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

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:

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

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

15.3. Further Information

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 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.