

Safety Data Sheet

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



462007 Titanium White Rutile in Linseed Oil

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Revised edition: 30.05.2017

Version: 1

Printed: 31.05.2017

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

1.1. Product Identifier

Product Name: Titanium White Rutile in Linseed Oil

Article No.: 462007

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.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 Regulation (EC) No. 1272/2008 (CLP/GHS)

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

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

The material is not subject to classification according to EC lists.

Safety Phrases:

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:

Other Hazards

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2.3. *Materials impregnated with oil may spontaneously combust. Impregnated cloths should be spread out for drying and stored in closed metal containers or in water.*

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Titanium white in linseed oil. Pigment White 6, C.I. 77891

Information on Components / Hazardous Ingredients:

Titanium dioxide (REACH Reg. No. 01-2119489379-17-0016)

CAS-Nr: 13463-67-7

EINECS-Nr: 236-675-5

EC-Nr:

Linseed oil

CAS-Nr: 8001-26-1

EINECS-Nr: 232-278-6

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Seek medical attention in case of complaints.

After inhalation:

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

After skin contact:

Wash with soap and rinse with plenty of water.

After eye contact:

Rinse open eye for several minutes under running water.

After ingestion:

Rinse mouth with plenty of water.

If symptoms persist consult physician.

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:

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:

In case of fire: formation of carbon oxides and smoke.

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device and protective clothing.

Further information:

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

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

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

For information for safe handling see Section 7.

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.

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.

Close opened containers carefully and store upright to avoid product to spill.

Requirements for storage areas and containers:

Store the product in the original container.

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Information on fire and explosion protection:

Keep away from heat, sparks and open flame.
Contaminated cleaning rags and cloths, and protective clothing may ignite spontaneously after several hours.

Storage class (VCI):

Further Information:

Storage temperature: 5 - 35°C

7.3. Specific End Use(s)

Further information:

No information available.

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

Titanium dioxide, CAS 13463-67-7
TRGS 900
TLV: 10 mg/m³ inhalable fraction (general dust limit)
TLV: 1.25 mg/m³ air-borne fraction (general dust limit)
Peak limit category 2
Category II: substances with a resorptive effect.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Titanium dioxide:
10 mg/m³ (worker, inhalation, chronic effect)

Predicted No-Effect Concentration (PNEC):

Titanium dioxide:
Fresh water: 0.127 mg/l
Seawater: ≥ 1 mg/l
Water: 0.61 mg/l
Fresh water sediment: ≥ 1000 mg/kg
Seawater sediment: ≥ 100 mg/kg
Soil: 100 mg/kg
Sewage treatment system (STP): ≥ 100 mg/kg

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Ensure adequate ventilation, especially in confined areas.

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.

Respiratory protection:

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Required in case of insufficient ventilation (EN 143 or 149).

Hand protection:

Protective gloves

Protective glove material:

Eye protection:

Safety glasses with protective shields (EN 166).

Body protection:

Not required.

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

<i>Form:</i>	<i>paste</i>
<i>Color:</i>	<i>white</i>
<i>Odor:</i>	<i>characteristic</i>
<i>Odor threshold:</i>	<i>not determined</i>
<i>pH-Value:</i>	<i>not determined</i>
<i>Melting temperature:</i>	<i>not applicable</i>
<i>Boiling temperature:</i>	<i>not determined</i>
<i>Flash point:</i>	<i>not available</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	
<i>Solubility in water:</i>	<i>insoluble</i>

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Coefficient of variation (n-Octanol/Water):

no information available

Auto-ignition temperature:

No information available.

Decomposition temperature:

No data available.

Viscosity, dynamic:

not determined

Explosive properties:

not applicable

Oxidizing properties:

Bulk density:

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

No decomposition if used according to specifications.

10.2. Chemical Stability

Stable if used according to specifications.

10.3. Possibility of Hazardous Reactions

None if used according to specifications.

10.4. Conditions to Avoid

Conditions to avoid:

Avoid heat and sources of ignition.

Materials impregnated with oil may spontaneously combust.

Thermal decomposition:

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

Carbon monoxide and dioxide.

10.7. Further Information

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11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

Titanium dioxide: > 5000 mg/kg (rat; OECD 425)

LD50, dermal:

Titanium dioxide: > 10000 mg/kg (rabbit)

LC50, inhalation:

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

Primary effects

Irritant effect on skin:

Titanium dioxide: non irritating (rabbit; OECD 404)

Irritant effect on eyes:

Titanium dioxide: non irritating (rabbit; OECD 405)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Titanium dioxide:

Not sensitizing (mouse).

No sensitizing effects known (guinea pig; OECD 406).

Mutagenicity:

Titanium dioxide:

No mutagenic effects observed.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

Titanium dioxide:

Product is not cancerogenic.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Titanium dioxide:

Repeated exposure: NOAEL (oral): 1000 mg/kg (rat; OECD 408)

Additional toxicological information:

Titanium dioxide:

Based on all available study results, DuPont scientists conclude that titanium dioxide will not cause lung cancer or chronic respiratory diseases in humans at concentrations experienced in the workplace.

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12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

Titanium dioxide:

LC50: > 1000 mg/l (96h, Pimephales promelas)

Daphnia toxicity:

Titanium dioxide:

EC50: > 100 mg/l (48h, Daphnia magna; OECD 202)

Bacteria toxicity:

not determined

Algae toxicity:

Titanium dioxide:

ErC50: > 100 mg/l (72h, Pseudokirchneriella subspicatus)

NOEC: 5600 mg/l (algae)

12.2. Persistency and Degradability

Titanium dioxide: not readily biodegradable.

12.3. Bioaccumulation

Titanium dioxide: no bioaccumulation

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.

12.6. Other Adverse Effects

Water hazard class:

1, slightly hazardous (German Regulation; Self-assessment).

Behaviour in sewage systems:

Further ecological effects:

No special effects or hazards known.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Must be treated as toxic waste according to local laws and regulations.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled.

Waste Code No.:

14. Transport Information

14.1. UN Number

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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:

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:

1, slightly hazardous for water (German Regulation, self-assessment)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Restricted to professional users.

Technical instructions on air quality:

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15.2. Chemical Safety Assessment

This product contains substances for which a Chemical Safety Assessment has been carried out.

15.3. Further Information

Titanium dioxide:

EINECS (EU), TSCA (US), AICS (AUS), DSL (CA), PICCS (PH), ENCS (JP), KECI (KR), INV (CN)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop. 65: WARNING! This product contains a chemical known to the State of California to cause cancer. The listing of titanium dioxide is for "airborne, unbound particles of respirable size." The listing is not applicable to titanium dioxide when it remains bound within a product matrix.

PA Right to Know Regulated Chemical(s): Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1 % or more (0.01% for Special Hazardous Substances): Titanium dioxide, Silicon dioxide, amorphous

Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Titanium dioxide, Silicon dioxide, amorphous

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.