

Safety Data Sheet

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



46300 Zinc White

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Revised edition: 01.12.2019

Version: 4

Printed: 02.04.2020

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

1.1. Product Identifier

Product Name: Zinc White

Article No.: 46300

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

Identified uses:

*Raw material for the chemical-pharmaceutical industry.
Paint-related material.
Varnish additive.*

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)*

H410

Cat.: 1

*Hazardous to the aquatic environment, hazard category 1
Very toxic to aquatic life with long lasting effects.*

Possible Environmental Effects:

2.2. Label Elements

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

Hazard designation:



GHS09-1

Signal word:

Warning

Hazard designation:

H410

Very toxic to aquatic life with long lasting effects.

Safety designation:

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P273	Avoid release to the environment.
P391	Collect spillage
P501	Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3. Other Hazards

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Pure zinc oxide

Information on Components / Hazardous Ingredients:

Zinc oxide (H410); REACH Reg. No. 01-2119463881-32-0000	100 %	CAS-Nr: 1314-13-2 EINECS-Nr: 215-222-5 EC-Nr: 030-013-00-7
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Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Remove contaminated clothes immediately.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

Remove contaminated clothing. Wash off immediately with plenty of water and soap.

If symptoms persist, consult a physician.

After eye contact:

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

After ingestion:

Rinse mouth thoroughly with plenty of water and drink plenty of water. Consult a 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

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Suitable extinguishing media:

*Product itself does not burn.
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 zinc oxide fumes.

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.*

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Ensure adequate ventilation.
Do not inhale dust. Avoid formation of dust.
Avoid contact with eyes and skin.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

*Clean up mechanically. Transfer liquids and solid diking material to
separate suitable containers for recovery or disposal.*

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:

*Provide adequate ventilation.
Avoid formation and deposition of dust. Provide adequate
ventilation.
Avoid contact with eyes and skin.*

Hygienic measures:

*Do not inhale dust. Wash hands before breaks and at the end of
work.
Avoid repeated and longterm contact with skin.*

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

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Store in tightly sealed containers in a dry and cool room.

Requirements for storage areas and containers:

Water law provisions have to be met.

Information on fire and explosion protection:

No special measures necessary.

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):

*TWA: 10 mg/m³ general dust limit inhalable fraction.
TWA-Value: 3 mg/m³ airborne fraction (general dust limit)*

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

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. Avoid contact with eyes and skin.

Respiratory protection:

In case of formation of dust.

Hand protection:

*Protective gloves (EN 374)
The manufacturer's directions for use should be observed because of the great diversity of types.*

Protective glove material:

Nitrile rubber (NBR)

Eye protection:

Tightly fitting safety goggles (EN 166).

Body protection:

Protective clothing.

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Environmental precautions:

Avoid contamination of sewage system, open water ways and ground water.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>white</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>7 (50 g/l; 20°C)</i>
<i>Melting temperature:</i>	<i>1975°C</i>
<i>Boiling temperature:</i>	<i>not determined</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not flammable</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 determined</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>5.60 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>0.0016 g/l</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>not applicable</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	

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Product does not present an explosion hazard.

Oxidizing properties:

no information available

Bulk density:

300 - 500 kg/m³

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

No decomposition if used according to specifications.

10.3. Possibility of Hazardous Reactions

Reacts with strong acids and bases.

10.4. Conditions to Avoid

Conditions to avoid:

No decomposition if used according to specifications.

Thermal decomposition:

10.5. Incompatible Materials

Strong acids and alkalies.

10.6. Hazardous Decomposition Products

Fumes of zinc oxide.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD₅₀, oral:

> 5000 mg/kg (rat)

LDLo: 500 mg/kg (human)

LD₅₀, dermal:

No information available.

LC₅₀, inhalation:

> 5.7 mg/l (4h, rat)

Primary effects

Irritant effect on skin:

Dust may cause irritation.

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Irritant effect on eyes:

Product dust may cause irritation.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

Mutagenicity:

No relevant data found.

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:

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

LC50: 1.1 mg/l (48h; Oryzias latipes)

Daphnia toxicity:

EC50: > 1000 mg/l (48h, Daphnia magna)

Bacteria toxicity:

No data available.

Algae toxicity:

IC50: 0.17 mg/l (72h, Pseudokirchneriella subcapitata); NOEC: 0.017 mg/l (72h, Pseudokirchneriella subcapitata)

12.2. Persistency and Degradability

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

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

PBT/vPvB assessment not available as chemical safety assessment is not required / not conducted.

12.6. Other Adverse Effects

Water hazard class:

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2 (German Regulation) (Assessment by list): hazardous.

Behaviour in sewage systems:

Further ecological effects:

*May cause long-term adverse effects in the aquatic environment.
Prevent product from entering surface water and drains.
Very toxic for water organisms.*

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

The waste code must be determined together with the regional disposal service.

Uncleaned packaging:

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA 3077

14.2. UN Proper Shipping Name

ADR/RID: UMWELTGEFÄHRDENDER STOFF, FEST, N.A.G. (Zinkoxid)

IMDG/IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)

14.3. Transport Hazard Classes

ADR Class: 9

Hazard no.: 9

Classification code: M7

Tunnel restriction code:

IMDG Class (sea): 9

Hazard no.: 9

EmS No.: F-A, S-F

IATA Class: 9

Hazard no.: 9

14.4. Packaging Group

ADR/RID: III

IMDG: III

IATA: III

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14.5. Environmental Hazards

Labelling according 5.2.1.8 ADR/RID: fish and tree

Labelling according 5.2.1.6.3 IMDG: fish and tree

14.6. Special Precautions for User

Not classified as dangerous goods class 9 when packaging is smaller or equal to 5 kg / L

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

IMDG: 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:

2, hazardous for water (German Regulation)

Local regulations on chemical accidents:

Seveso III:

Environmentally hazardous (E1); Amount 1: 100 t; Amount 2: 200 t

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.

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.

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern above the legal limit value (> 0.1 % (w/w) REACH Regulation (EC) 1907/2006, Article 57).

15.3. Further Information

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

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.