

# Safety Data Sheet

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



**46300 Zinc White**

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Revised edition: 10.08.2023

Version: 5

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

### 1.1. Product Identifier

*Product Name:* Zinc White  
*Article No.:* 46300  
*UFI:* --

### 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:*

Very toxic to aquatic life with long lasting effects.

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H410

*Safety designation:*

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 (H400-410); 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.  
Self-protection of the first-aider:*

*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:*

*Gastro-intestinal complaints.  
Nausea  
Headache, fever*

*Effects:*

**Indication of any Immediate Medical Attention and special Treatment needed**

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4.3.

*Treatment:*

*No further information available.*

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## 5. Fire-Fighting Measures

### 5.1. Extinguishing Media

*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:*

*The product is not flammable.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device and full protective gear.*

*Further information:*

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

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## 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.*

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## 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.*

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*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.*

*Keep away from foodstuffs and drinks.*

### 7.2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*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:*

*13; Non combustible solids (TRGS 510)*

*Further Information:*

### 7.3. Specific End Use(s)

*Further information:*

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## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*TRGS 900*

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

*TLV: 1.25 mg/m3 air-borne fraction (general dust limit)*

*Zinc oxide (CAS 1314-13-2): TLV: 10 mg/m3 (inhalable fraction);*

*1.25 mg/m3 (airborne fraction)*

*Parameters to be controlled:*

*Zink Oxide (CAS 1314-13-2): MAK (A): 5 mg/m3, (CH): 3 mg/m3 (airborne fraction)*

*Derived No-Effect Level (DNEL):*

*Predicted No-Effect Concentration (PNEC):*

*Zinc oxide:*

*Freshwater: 17.9 µg/l*

*Sea water: 9 µg/l*

*Fresh water sediment: 182.8 mg/kg*

*Sea water sediment: 201.9 mg/kg*

*Sewage treatment system (STP): 0.125 mg/l*

*Soil: 103.4 mg/kg*

*Additional Information:*

### 8.2. Exposure Controls

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### *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 (> 480 min, 0.11 mm).*

#### *Eye protection:*

*Tightly fitting safety goggles (EN 166).*

#### *Body protection:*

*Protective clothing.*

#### *Environmental precautions:*

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

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## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

*Form: powder*

*Color: white*

*Odor: odorless*

*Odor threshold: no information available*

*pH-Value: 7 (50 g/l; 20°C)*

*Melting temperature: 1975°C (OECD 102)*

*Boiling temperature: not determined*

*Flash point: not applicable*

*Evaporation rate: No information available.*

*Flammability (solid, gas): not flammable*

*Upper explosion limit: no information available*

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*Lower explosion limit:*

*no information available*

*Vapor pressure:*

*not determined*

*Vapor density:*

*No information available.*

*Density:*

*5.60 g/cm<sup>3</sup> (20°C)*

*Solubility in water:*

*1.6 mg/l*

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

*not determined*

*Auto-ignition temperature:*

*Product is not auto-ignitable.*

*Decomposition temperature:*

*> 2000°C (lit.)*

*Viscosity, dynamic:*

*not applicable*

*Explosive properties:*

*Product does not present an explosion hazard.*

*Oxidizing properties:*

*no information available*

*Bulk density:*

*300 - 500 kg/m<sup>3</sup>*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

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## 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.*

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*Thermal decomposition:*

10.5. **Imcompatible Materials**

*Aluminium, magnesium*

10.6. **Hazardous Decomposition Products**

*None known.*

10.7. **Further Information**

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11. **Toxicological Information**

11. 1. **Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008**

*Acute Toxicity*

*LD50, oral: > 2000 mg/kg (rat; OECD 423)*

*LD50, dermal: > 2000 mg/kg (rat; OECD 402)*

*LC50, inhalation: > 5.7 mg/l (4h, rat)*

*Primary effects*

*Irritant effect on skin:*

*Dust may cause irritation.*

*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):*

*Single exposure: Not classified based on available information.*

*Repeated exposure: Not classified based on available information.*

*Aspiration hazard:*

*No risk of aspiration.*

11. 2. **Information on other Hazards**

*Endocrine Disrupting Properties: no information available.*

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12. **Ecological Information**

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### 12.1. Aquatic Toxicity

*Fish toxicity:*

*LC50: 2.525 mg/l (96h; Danio rerio); NOEC: 0.2 mg/l (30d, Oncorhynchus mykiss; OECD 215)*

*Daphnia toxicity:*

*EC50: 1 mg/l (48h, Daphnia magna; OECD 202); EC50: 0:08 mg/l (21d, Daphnia magna; OECD 211)*

*Bacteria toxicity:*

*No data available.*

*Algae toxicity:*

*NOEC: 0.024 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)*

### 12.2. Persistency and Degradability

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

### 12.3. Bioaccumulation

*Bioaccumulation is not to be expected.*

### 12.4. Mobility

*Log K: 3,24 (OECD 106)*

### 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. Endocrine Disrupting Properties

*This product does not contain components considered to have endocrine disrupting properties.*

### 12.7. Other Adverse Effects

*Water hazard class:*

*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:*

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## 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.:*

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### 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

#### 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. Maritime Transport in Bulk according to IMO Instruments

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 Directive (2012/18/EU):

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

Employment restrictions:

The employment restrictions for young workers in accordance with next page: 10

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*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 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

*EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable*

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

*Regulation on Persistent Organic Pollutants (POP): not listed*

*Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable*

*RoHS Directive 2011/65/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHs): not listed.*

*Regulation (EU) No. 2019/1148, Annex I - Restricted Explosives Precursors (upper limit value for the purpose of licensing under Article 5(3)): None of the ingredients is listed.*

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### 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.*