

Version: 1/DE Date revised: 16.05.2019 Item No. 71165

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

71165 GERSTAECKER Artists Pigments - Zinc White

Registration no.

EC No.: 215-222-5 CAS No. 1314-13-2

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

## Use of the substance/preparation

Colourant

## 1.3. Details of the supplier of the safety data sheet

Johannes Gerstaecker Verlag GmbH Wecostraße 4 53783 Eitorf Telefon 02243/889-0 www.gerstaecker.de

## 1.4. Emergency telephone number

+49 (0) 551 - 19240

### **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

## Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

H400 Aquatic Acute 1 Aquatic Chronic 1 H410

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008 For explanation of abbreviations see section 16.

#### 2.2. Label elements

### Labelling according to regulation (EC) No 1272/2008

# Hazard pictograms



### Signal word

Warning

# **Hazard statements**

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements** 

Avoid release to the environment. P273

P391 Collect spillage.

P501 Dispose of contents/container according to waste.

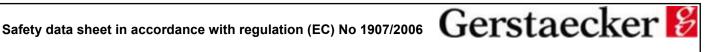
# 2.3. Other hazards

**Dust loading** 

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Chemical characterization



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7inc oxide

Hazardous ingredients (Regulation (EC) No. 1272/2008)

Zinc oxide

CAS No. 1314-13-2 EINECS no. 215-222-5

Concentration 99.9 %

Classification (Regulation (EC) No. 1272/2008)

H400 Aquatic Acute 1 Aquatic Chronic 1 H410

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

In case of persistent symptoms consult doctor.

#### After inhalation

Remove the casualty into fresh air and keep him calm. In the event of symptoms take medical treatment.

#### After skin contact

Remove contaminated clothing. Wash off immediately with soap and water. Consult a doctor if skin irritation persists.

#### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

#### After ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Call in a physician immediately and show him the Safety Data Sheet.

## Adhere to personal protective measures when giving first aid

First aider: Pay attention to self-protection!

### 4.2. Most important symptoms and effects, both acute and delayed

Inhalation of dusts may irritate the respiratory tract. The following symptoms may occur: Coughing, Asthmatic complaints, Gastrointestinal complaints

## 4.3. Indication of any immediate medical attention and special treatment needed

## Hints for the physician / treatment

Inhalation can lead to flu-like illnesses (metal fume fever).

## **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

#### Suitable extinguishing media

Water spray jet, Foam, Carbon dioxide

## Non suitable extinguishing media

Full water jet

## 5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Irritant and harmful combustion products.

#### 5.3. Advice for firefighters

## Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full protective suit.

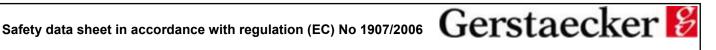
#### Other information

Fire residues and contaminated fire-fighting water must be disposed of in accordance with the local regulations.

#### **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Do not inhale dust. Use breathing apparatus if exposed to vapours/dust/aerosol. Ensure adequate ventilation. Use personal protective clothing. High risk of slipping due to leakage/spillage of product. Refer to protective measures listed in Sections 7 and 8. Remove persons to safety.



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#### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil. Retain and dispose of contaminated wash water.

#### 6.3. Methods and material for containment and cleaning up

Avoid raising dust. Pick up mechanically. Place in a suitable container. Containers in which spilt substance has been collected must be adequately labelled. When picked up, treat material as prescribed under Section 13 "Disposal".

#### 6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid the formation and deposition of dust. Provide exhaust ventilation if dust is formed. Ensure adequate ventilation. Handle and open container with care. Provide suitable exhaust ventilation at the processing machines. Use breathing apparatus when transferring large quantities without exhaust ventilation facilities. If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Observe the usual precautions for handling chemicals. Avoid skin and eye contact.

## Advice on protection against fire and explosion

No special measures required.

### 7.2. Conditions for safe storage, including any incompatibilities

### Hints on storage assembly

Do not store together with foodstuffs.

# Further information on storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from direct sunlight. Protect from extreme heat and cold.

### **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

# **Exposure limit values**

## Zinc oxide

**TRGS 900** List MAK Type

Value mg/m<sup>3</sup> Maximum limit value: 4; Status: 02.04.2014; Remarks: DFG

#### Other information

The national general dust limit must be observed. TRGS 900: Oberserve the general dust threshold.

#### 8.2. Exposure controls

# General protective and hygiene measures

Do not inhale dust/fumes/aerosols. Avoid contact with skin and eyes. Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Use barrier skin cream. Observe the usual precautions for handling chemicals. Take off immediately all contaminated clothing.

If workplace limits are exceeded, a respiratory protection approved for this particular job must be worn. Particle filter P2; The respiratory protection must comply with the relevant CEN standards. Use breathing apparatus in dust-laden atmosphere.

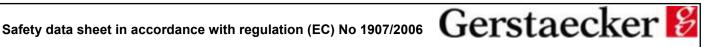
### Hand protection

Chemical resistant gloves

Appropriate Material rubber Appropriate Material Leather Hand protection must comply with EN 374.

Observe the information of the glove manufacturers on permeability and breakthrough times and other workplace requirements.

## Eye protection



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Safety glasses with side protection shield; Eye protection must comply with EN 166.

**Body protection** 

Clothing as usual in the chemical industry.

## **SECTION 9: Physical and chemical properties**

9.1. Information on basic physical and chemical properties

**Form** Powder Colour see tradename Odour characteristic

**Odour threshold** 

not determined Remarks

pH value

7 8 Value Temperature 20 Method Value taken from the literature

**Melting point** 

not determined Remarks

Freezing point

Remarks not determined

Initial boiling point and boiling range

Not applicable Remarks

Flash point

Remarks Not applicable

Evaporation rate (ether = 1):

Remarks not determined

Flammability (solid, gas)

not determined

Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

5,68 Value g/cm<sup>3</sup>

Temperature 20 °C

Literature value Source

Solubility in water

not determined Remarks

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

not determined Remarks

**Decomposition temperature** 

not determined Remarks

**Explosive properties** 

not determined evaluation

**Oxidising properties** 

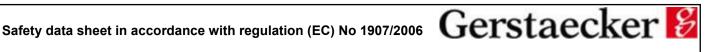
Remarks not determined

9.2. Other information

Other information

None known

**SECTION 10: Stability and reactivity** 



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### 10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

#### 10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

#### 10.3. Possibility of hazardous reactions

Zinc oxide and magnesium can react violently when heated. Chlorinated rubber and zinc oxide react violently and explosively at about 216 ° C. Violent reactions are also possible with hydrogen peroxide.

#### 10.4. Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

#### **Decomposition temperature**

not determined Remarks

#### 10.5. Incompatible materials

Acids, Oxidising agents, Alkalis, Incompatible with alkaline substances .

#### 10.6. Hazardous decomposition products

Toxic gases/vapours, Toxic metal oxide fumes

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

#### Acute oral toxicity

Remarks not determined

### **Acute oral toxicity (Components)**

#### Zinc oxide

Species rat

LD50 5000 mg/kg

**OECD 401** Method

Remarks Based on available data, the classification criteria are not met.

Source Literature value

Acute dermal toxicity

Remarks not determined

Acute inhalational toxicity

not determined Remarks

## **Acute inhalative toxicity (Components)**

#### Zinc oxide

Species rat

LC50 5,7 mg/l

**OECD 403** Method

Remarks Based on available data, the classification criteria are not met.

Literature value Source

#### Skin corrosion/irritation

#### Zinc oxide

Species rabbit

25 Duration of exposure h

evaluation non-irritant Literature value Source

Löser, 1977; Lansdown, 1991 Source

### Serious eye damage/irritation

Remarks not determined

Remarks Eye contact with the product may lead to irritation.

Sensitization

Remarks not determined

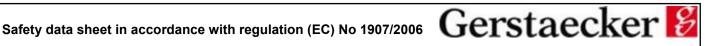
# Subacute, subchronic, chronic toxicity

Remarks

Remarks Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Mutagenicity

Remarks not determined



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Reproductive toxicity

Remarks not determined

Carcinogenicity

not determined Remarks

Specific Target Organ Toxicity (STOT)

not determined Remarks

Other information

No toxicological data are available.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### **General information**

not determined

### Fish toxicity (Components)

Zinc oxide

LC50 0,169 mg/l

Source Literature value

## Algae toxicity (Components)

Zinc oxide

LC50 0.136 mg/l

Literature value Source

#### 12.2. Persistence and degradability

#### **General information**

not determined

### Physico-chemical eliminability

Zinc oxide

Slightly water-soluble inorganic product. It can be removed to a large extent in a Remarks

chemical purification plant.

## 12.3. Bioaccumulative potential

#### General information

Zinc is a natural element indispensable to all living organisms. Living organisms have a self-regulating mechanism that actively regulates the zinc uptake as well as absorption and excretion by the body. Does not accumulate in organisms.

## Partition coefficient: n-octanol/water

Remarks not determined

## 12.4. Mobility in soil

#### **General information**

not determined

## 12.5. Results of PBT and vPvB assessment

## **General information**

The components of the product are not considered PBT or vPvB.

## 12.6. Other adverse effects

## **General information**

not determined

## General information / ecology

Avoid entry in the environment.

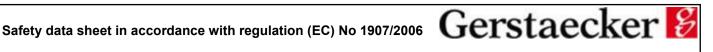
## **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

# Disposal recommendations for the product

Product should be taken to a suitable and authorized waste disposal site in accordance with relevant regulations and if necessary after consultation with the waste disposal operator and/or the competent Authorities.

Dispose of as hazardous waste.



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## Disposal recommendations for packaging

Packaging that cannot be cleaned should be disposed off as product waste.

Uncontaminated packaging may be taken for recycling.

## **SECTION 14: Transport information**

# Land transport ADR/RID

## 14.1. UN number

**UN 3077** 

# 14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)

## 14.3. Transport hazard class(es)

Class Label 9

14.4. Packing group

Ш Packing group Limited Quantity 5 kg Transport category 3

14.5. Environmental hazards

**ENVIRONMENTALLY HAZARDOUS** Tunnel restriction code F

## Marine transport IMDG/GGVSee

#### **14.1. UN number**

**UN 3077** 

#### 14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)

## 14.3. Transport hazard class(es)

Class

14.4. Packing group

Packing group Ш

## 14.5. Environmental hazards

Marine Pollutant

#### Air transport ICAO/IATA

## 14.1. UN number

UN 3077

# 14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide)

## 14.3. Transport hazard class(es)

Class

## 14.4. Packing group

Packing group Ш

# 14.5. Environmental hazards

**ENVIRONMENTALLY HAZARDOUS** 

# **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

## Water Hazard Class (Germany)

Water Hazard Class (Germany) WGK 2 Identification number 2187

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

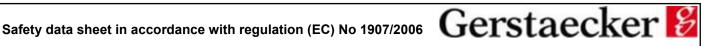
## 15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

### **SECTION 16: Other information**

## Hazard statements listed in Chapter 3

H400 Very toxic to aquatic life.



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H410 Very toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Aquatic Acute 1 Hazardous to the aquatic environment, acute, Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment, chronic, Category 1

### **Abbreviations**

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route

AGW: Arbeitsplatzgrenzwert

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling

substances that are hazardous to water)

**BGW**: Biologischer Grenzwert CAS: Chemical Abstracts Service DNEL: Derived no effect level

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

GGVSee: Gefahrgutverordnung See

IARC: International Agency for Research on Cancer IATA: International Civil Aviation Organization ICAO: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

LC: Lethal concentration

LD: Lethal dose

MAK: Maximale Arbeitsplatz-Konzentration NOEC: No observable effect concentration

NOEL: No observable effect level

OECD: Organisation for Economic Co-operation and Development

OEL: Occupational exposure limit

PBT: Persistent, Bioaccumulative and Toxic PNEC: Predicted no effect concentration

RID: Règlement concernant le transport international ferroviaire de marchandises dangereuses

TRGS: Technische Regeln für Gefahrstoffe

VDI: Verein Deutscher Ingenieure

VLEP: Valeurs Limites d'exposition Professionnelle vPvB: Very persistent and very bioaccumulative WGK: Wassergefährdungsklasse (water hazard class)

#### **Supplemental information**

These data are based on our present knowledge and experience respectively supplier-information. This safety data sheet describes the product in regard to the requirements of safety. Theses data do not have the significance of a propherty assurance. Existing laws and regulations are to be noticed by the receiver of our product in own responsibility. It is the responsibility of the user, to determine if the product is suitable for the deliberate operational area and the respective intended purpose. A liability for damages in connection with the use of this information is excluded. Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*