

# Safety Data Sheet

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



## 45400 Zirconium Cerulean Blue

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Revised edition: 04.02.2018

Version: 9

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

#### 1.1. Product Identifier

*Product Name:* Zirconium Cerulean Blue

*Article No.:* 45400

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

*Identified uses:*

*Pigment  
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:

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### 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

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### 3. Composition/Information on Ingredients

Substance

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3.1.

3.2. Mixture

*Chemical Characterization:* Inorganic pigment, Pigment Blue 71, C.I. 77998

*Information on Components / Hazardous Ingredients:*

*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. If required give artificial respiration. Keep patient warm.*

*After skin contact:*

*In case of skin irritation consult physician.*

*Do not use solvents or thinners.*

*After eye contact:*

*Rinse open eyes with plenty of water for at least 15 minutes.*

*After ingestion:*

*Rinse mouth with plenty of water and consult physician.*

*Do not induce vomiting.*

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:*

*Carbon dioxide (CO<sub>2</sub>), extinguishing powder.*

*Fight larger fire with water jet or alcohol resistant foam.*

*Unsuitable extinguishing media:*

*Water with full jet.*

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 full*

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*protective gear.*

*Further information:*

*Cool exposed containers with water spray.*

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### 6. Accidental Release Measures

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Ensure adequate ventilation.*

#### 6.2. Environmental Precautions

*Environmental precautions:*

*No special measures required.*

#### 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

*Protective clothing, see Section 8.*

*Dispose of contaminated material according to Section 13.*

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### 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:*

*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 dry and cool room.*

*Keep away from ignitable sources, heat and fire.*

*Store between 5 - 35°C.*

*Requirements for storage areas and containers:*

*Store the product in the original container.*

*Information on fire and explosion protection:*

*Storage class:*

*Further Information:*

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

#### 7.3. Specific End Use(s)

*Further information:*

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### 8. Exposure Controls/Personal Protection

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### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*Does not contain any components with workplace limit values.*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*Predicted No-Effect Concentration (PNEC):*

*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:*

*Respiratory equipment required in case of insufficient ventilation,  
filter type P2.*

*Hand protection:*

*Protective gloves*

*Protective glove material:*

*Polyvinyl chloride (> 480 min, 0.35 mm)*

*Eye protection:*

*Safety glasses (EN 166)*

*Body protection:*

*Environmental precautions:*

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## 9. Physical and Chemical Properties

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

*Form: powder*

*Color: blue*

*Odor: odorless*

*Odor threshold:*

*No information available.*

*pH-Value:*

*not determined*

*Melting temperature:*

*not applicable*

*Boiling temperature:*

*not available*

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*Flash point:*

*not applicable*

*Evaporation rate:*

*This product is a non-volatile solid.*

*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:*

*2.55 g/cm<sup>3</sup>*

*Solubility in water:*

*insoluble*

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

*not applicable*

*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:*

### 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

*Stable if used according to specifications.*

#### 10.2. Chemical Stability

*Stable if used according to specifications.*

#### 10.3. Possibility of Hazardous Reactions

*Unknown.*

#### 10.4. Conditions to Avoid

*Conditions to avoid:*

*No further information available.*

*Thermal decomposition:*

#### 10.5. Incompatible Materials

*Strong acids and alkalies.*

#### 10.6. Hazardous Decomposition Products

*None if stored and handled according to specifications.*

#### 10.7. Further Information

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### 11. Toxicological Information

#### 11. 1. Information on Toxicological Effects

*No toxicity expected.*

*Acute Toxicity*

*LD50, oral:*

*LD50, dermal:*

*LC50, inhalation:*

*Primary effects*

*Irritant effect on skin:*

*No irritant effect known.*

*Irritant effect on eyes:*

*No irritant effect known.*

*Inhalation:*

*No irritant effect known.*

*Ingestion:*

*No irritant effect known.*

*Sensitization:*

*No sensitizing effects known.*

*Mutagenicity:*

*No mutagenic effects known.*

*Reproductive toxicity:*

*No negative effects known.*

*Carcinogenicity:*

*No relevant data found.*

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### *Teratogenicity:*

*No relevant data found.*

### *Specific target organ toxicity (STOT):*

*No relevant data found.*

### *Additional toxicological information:*

*Skin contact: repeated or long-term contact with the product can cause skin irritation and dermatitis.*

*Eye contact: dust particles can cause mechanical irritation.*

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## 12. Ecological Information

### 12.1. Aquatic Toxicity

*No toxicity expected.*

*Fish toxicity:*

*Daphnia toxicity:*

*Bacteria toxicity:*

*Algae toxicity:*

### 12.2. Persistency and Degradability

*Inorganic product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants.*

### 12.3. Bioaccumulation

*No information available.*

### 12.4. Mobility

*No information available.*

### 12.5. Results of PBT- und vPvP Assessment

*No data available.*

### 12.6. Other Adverse Effects

*Water hazard class:*

*Do not let run into surface waters, waste water or soil.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*AOX Value:*

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## 13. Disposal Considerations

### 13.1. Waste Treatment Methods

*Product:*

*Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and local regulations.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

*Dispose of according to official local regulations.*

*Waste Code No.:*

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### 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:*

#### 14.5. Environmental Hazards

*Not classified as environmentally hazardous.*

#### 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

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### 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:*

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*Restriction and prohibition of application:*

*Technical instructions on air quality:*

### 15.2. Chemical Safety Assessment

*A Chemical Safety Assessment is not necessary for this product.*

### 15.3. Further Information

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

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

*VOC Content (w/w): 0 %*

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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.*