

# Safety Data Sheet

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



## 48422 Iron Oxide Black 360, black blue

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Revised edition: 03.09.2018

Version: 1.0

Printed: 06.11.2018

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

#### 1.1. Product Identifier

*Product Name:* Iron Oxide Black 360, black blue

*Article No.:* 48422

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

*Identified uses:* Coloring agent (pigment and dyes), inorganic.

*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.

### 3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

*Chemical Characterization:* Fe<sub>3</sub>O<sub>4</sub>. Pigment Black 11, C.I. 77499

*Information on Components / Hazardous Ingredients:*

Triiron tetraoxide (Fe <sub>3</sub> O <sub>4</sub> ), Magnetite; REACH Reg. No. 01-2119457646-28-0000	100 %	CAS-Nr: 1317-61-9 EINECS-Nr: 215-277-5 EC-Nr:
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*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. In case of complaints or unconsciousness consult a physician. In case of unconsciousness place patient stable in side position for transportation.*

*In case of unconsciousness place patient stable in side position for transportation.*

*Keep the airways open. Unfasten tight garments (collar, tie, belt).*

*After skin contact:*

*No special measures required.*

*After eye contact:*

*Remove contact lens. Rinse open eyes with plenty of water (10-15 min). Should irritation continue, seek medical advice.*

*After ingestion:*

*No special measures required.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*No further information available.*

*Effects:*

*No further information available.*

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:*

*Foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder, water spray.*  
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*Unsuitable extinguishing media:*

*None known.*

### 5.2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*No special hazards.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.*

*Further information:*

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## 6. Accidental Release Measures

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

*Personal precautions:*

*Wear appropriate protective equipment. Keep spectators away.  
Ensure adequate ventilation.  
Floor may be slippery; use care to avoid falling.*

### 6.2. Environmental Precautions

*Environmental precautions:*

*Prevent contamination of soil, drains and surface waters.  
Contact local authorities if product pollutes soil or vegetation.*

### 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

*In case of emergency, see Section 1.  
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:*

*No special measures necessary if properly handled.*

*Hygienic measures:*

*No special measures required.*

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

*Storage conditions:*

*Store dry and in the original tightly sealed containers.*

*Requirements for storage areas and containers:*

*Information on fire and explosion protection:*

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*Storage class (VCI):*

*13; Non combustible solids*

*Further Information:*

*No information available.*

### 7.3. Specific End Use(s)

*Further information:*

*No information available.*

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## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*none known*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*Triiron tetraoxide (CAS 1317-61-9):*

*10 mg/m<sup>3</sup> (worker, inhalation, long-term exposition - systemic and local effects)*

*Predicted No-Effect Concentration (PNEC):*

*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. Wash contaminated clothes before reuse.*

*Respiratory protection:*

*Dust mask recommended when very dusty (with particle filter P1).*

*Hand protection:*

*Protective gloves (EN 374)*

*Protective glove material:*

*Leather (< 60 min)*

*Eye protection:*

*Safety glasses with protective shields (EN 166).*

*Body protection:*

*Protective clothing.*

*Environmental precautions:*

*Prevent from getting into the soil, surface water and sewage system.*

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## 9. Physical and Chemical Properties

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### 9. 1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>black</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>4 - 8 (10 % w/w)</i>
<i>Melting temperature:</i>	<i>&gt; 1000°C (&gt; 1832°F)</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not available</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>not available</i>
<i>Upper explosion limit:</i>	<i>not determined</i>
<i>Lower explosion limit:</i>	<i>not determined</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>4.6 kg/l (20°C)</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>no information available</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	<i>not applicable</i>
<i>Oxidizing properties:</i>	<i>No information available.</i>

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*Bulk density:*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

*No further information.*

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## 10. Stability and Reactivity

### 10.1. Reactivity

*No information available.*

### 10.2. Chemical Stability

*The product is stable.*

### 10.3. Possibility of Hazardous Reactions

*This material is considered to be stable.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Avoid temperatures above 80°C: product can become instable and oxidize. Under unfavourable condtions, the additionally caused heat can lead to ignition of combustible materials nearby. Therefore, do not store the product near sources of heat.*

*Thermal decomposition:*

*Avoid heat.*

### 10.5. Incompatible Materials

*No information available.*

### 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

*Acute Toxicity*

*LD50, oral:*

*Not tested.*

*LD50, dermal:*

*not determined*

*LC50, inhalation:*

*not determined*

*Primary effects*

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*Irritant effect on skin:*

*Non irritating*

*Irritant effect on eyes:*

*Non-irritating to eyes*

*Inhalation:*

*No information available.*

*Ingestion:*

*No information available*

*Sensitization:*

*No sensitizing effect (guinea pig).*

*Mutagenicity:*

*Not mutagenic (Ames Test)*

*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:*

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## 12. Ecological Information

### 12.1. Aquatic Toxicity

*Fish toxicity:*

*No data available.*

*Daphnia toxicity:*

*No information available.*

*Bacteria toxicity:*

*no information available*

*Algae toxicity:*

*No information available.*

### 12.2. Persistency and Degradability

*No information available.*

### 12.3. Bioaccumulation

*No information available.*

### 12.4. Mobility

*No information available.*

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

*Not applicable.*

### 12.6. Other Adverse Effects

*Water hazard class:*

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*Not hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*AOX Value:*

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### 13. Disposal Considerations

#### 13.1. Waste Treatment Methods

*Product:*

*If possible reuse product.*

*Dispose of according to official national and local regulations.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

*Uncontaminated packaging may be recycled. Completely empty packaging can be disposed of with the regular waste.*

*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:*

*Hazard no.:*

#### 14.4. Packaging Group

*ADR/RID:*

*not applicable*

*IMDG:*

*IATA:*

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### 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

*Not classified as a dangerous good under transport regulations.*

*Protect against moisture.*

*Do not store together with foodstuffs.*

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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, Assessment by list)*

*Local regulations on chemical accidents:*

*Seveso III Directive: not applicable under Directive 2012/18/EC.*

*Employment restrictions:*

*Restriction and prohibition of application:*

*EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable*

*Chemical Weapons Convention (CWC), Lists of toxic chemicals and raw materials: not forbidden and/or restricted*

*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) 850/2004 - Persistent organic pollutants and amending Directive 79/117/EEC: not regulated / not applicable*

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

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

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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.*