

# Safety Data Sheet

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



## 23065 Phthalo Blue, Cyan Blue transparent, PB 15:4

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Version: 1.04

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

#### 1.1. Product Identifier

*Product Name:* Phthalo Blue, Cyan Blue transparent, PB 15:4

*Article No.:* 23065

*UFI:*

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

*Identified uses:*  
Pigment

*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

*EMail:* 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)*

H412

Cat.: 3

*Hazardous to the aquatic environment, hazard category 2  
Harmful 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:*  
Not applicable.

*Signal word:*

*Hazard designation:*  
H412 Harmful to aquatic life with long lasting effects.

*Safety designation:*  
P273 Avoid release to the environment.

P501 Dispose of contents/ container according to regional, national and next page: 2

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international regulations.

*Hazardous components for labelling:*

2.3. Other Hazards

*This product is capable of dust explosion under certain circumstances.*

*Dust may be produced when working with this material, which can cause a mechanical irritation of eyes, nose and respiratory tract.*

### 3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

*This produkt is a mixture.*

*Chemical Characterization:*

*Pigment Blue 15:4, C.I. 74160*

*Preparation made of: Copper phthalocyanine pigment*

*Information on Components / Hazardous Ingredients:*

Hydrogen-[29H,31H-phthalocyanine sulfonate(3-)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1) (H319-400-410); REACH Reg. No. 01-212010495-65

5 - 10 %

CAS-Nr: 73455-75-1

EINECS-Nr: 277-475-8

EC-Nr:

*Additional information:*

*Particle characteristics:*

*This product/this mixture contains nanoforms.*

*C.I. Pigment Blue 15 ([29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32] copper) (CAS 147-14-8):*

*Form: Orthorhombic; aspect ratio (x:1) = 1 to 3 (TEM);*

*crystallinity: crystalline; agent(s): no special treatment; specific surface area: 30–94 m<sup>2</sup>/m<sup>3</sup> (BET)*

*Particle size distribution: d10: 10 - 50 nm; d50: 10 - 100 nm; d90: 20 - 150 nm*

### 4. First Aid Measures

4.1. Description of the First Aid Measures

*General information:*

*If symptoms occur, or in case of doubt seek medical advice.*

*In case of unconsciousness give nothing by mouth, place in stable side position and seek medical advice.*

*After inhalation:*

*Supply fresh air and keep patient calm.*

*In case breathing is not regular or if it has stopped, seek medical advice immediately and initiate first aid measures.*

*After skin contact:*

*Wash with plenty of water and soap. Remove contaminated clothing and shoes.*

*Clean skin thoroughly with soap and water or use an approved skin cleanser.*

*Do not use solvents or thinners.*

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*After eye contact:*

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

*Remove contact lenses, if present and easy to do.*

*After ingestion:*

*If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.*

4. 2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*Exposure to concentrations in the air that exceed legal or recommended limits may cause irritation of the nose, throat, and lungs.*

*Effects:*

*No further information available.*

4. 3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.*

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## 5. Fire-Fighting Measures

5. 1. Extinguishing Media

*Suitable extinguishing media:*

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

*Unsuitable extinguishing media:*

*Do not use a solid water stream as it may scatter and spread fire.*

5. 2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*In case of fire: hazardous gases/vapors may be released.*

*In case of fire: formation of carbon oxides, nitrogen oxides and fumes.*

5. 3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Further information:*

*This material is toxic to aquatic organisms and has long-term effects. Firefighting water contaminated with this substance must be contained and must not be allowed to enter waterways, sewers, or drains.*

*Not explosive.*

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## 6. Accidental Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

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*Avoid formation of dust, wear protective clothing.*

6. 2. Environmental Precautions

*Environmental precautions:*

*Keep spills and cleaning runoff out of municipal sewers and open bodies of water.*

*Contact local authorities if product pollutes waterways or the sewage system.*

6. 3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Absorb with inert material (e.g. sand, earth, vermiculite, diatomaceous earth) and place in a suitable container for disposal. Preferably clean with detergent. Avoid the use of solvents.*

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:*

*Avoid formation of dust. Do not inhale dust.*

*Use suitable respiratory protection in case of inadequate ventilation.*

*Wear adequate protective clothing (see para. 8).*

*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.*

*Clean contaminated clothing before entering eating areas.*

7. 2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

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

*Protect against heat and direct sunlight.*

*Requirements for storage areas and containers:*

*Close open containers with care and store in an upright position to avoid spilling.*

*Do not reuse container.*

*Information on fire and explosion protection:*

*Keep away from sources of heat and ignition - do not smoke.*

*Storage class:*

*11; Combustible solids (TRGS 510)*

*Further Information:*

7. 3. Specific End Use(s)

*Further information:*

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See Section 1.2.; no other uses provided

### 8. Exposure Controls/Personal Protection

#### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*No occupational exposure limits known.*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*Hydrogen-[29H,31H-phthalocyanine sulfonate(3-)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1):*

*3.5 mg/m<sup>3</sup> (worker, inhalation, long-term exposure - systemic effects)*

*10 mg/kg (worker, skin contact, long-term exposure - systemic effects)*

*0.87 mg/m<sup>3</sup> (consumer, inhalation, long-term exposure - systemic effects)*

*5 mg/kg bw/d (worker, skin contact, long-term exposure - systemic effects)*

*0.5 mg/kg (consumer, swallowing, long-term exposure - systemic effects)*

*PNEC (Predicted No-Effect Concentration):*

*No values available.*

*Additional Information:*

#### 8.2. Exposure Controls

*Technical protective measures:*

*Provide adequate ventilation/exhaust system.*

*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:*

*Required in case of insufficient ventilation.*

*Use a properly fitted and approved respirator with a particulate filter if the risk assessment requires it.*

*Hand protection:*

*Chemical protective gloves (EN 374 (Europe), F739 (US)).*

*The manufacturer's directions for use should be observed because of the great diversity of types.*

*Protective glove material:*

*It should be noted that the breakthrough time for glove material may vary between different glove manufacturers.*

*For mixtures consisting of several substances, the protective*

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*period of the gloves cannot be accurately estimated.*

*Eye protection:*

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

*Body protection:*

*Staff should wear antistatic clothing made of natural fibers or heat-resistant synthetic fibers.*

*Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.*

*Environmental precautions:*

*Do not allow entering sewerage system.*

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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:* 7

*Melting temperature:* 300°C

*Boiling temperature:*  
not determined

*Flash point:*  
not applicable

*Evaporation rate:*  
This product is a non-volatile solid.

*Flammability (solid, gas):* 450°C (BAM)  
not highly flammable

*Upper explosion limit:*  
no information available

*Lower explosion limit:*  
no information available

*Vapor pressure:*  
not applicable

*Vapor density:*  
This product is a non-volatile solid.

*Density:* 1.6 g/m<sup>3</sup> (20°C)

*Solubility in water:* insoluble

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

*not applicable*

*Auto-ignition temperature:*

450°C (842°C)

*Product is not auto-ignitable (Test type: Spontaneous self-ignition at room temperature)*

*Decomposition temperature:*

> 200°C

*Viscosity, dynamic:*

*not applicable*

*Explosive properties:*

*Product does not present an explosion hazard.*

*Oxidizing properties:*

*not oxidizing*

*Bulk density:*

ca. 363 kg/m<sup>3</sup>

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Particle characteristics: Further details regarding the determination of nanoforms see Section 3.*

*Other information:*

*Self-heating ability: This product is not a self-heating substance according to the UN class 4.2 (UN Test N.4)*

## 10. Stability and Reactivity

### 10.1. Reactivity

*No decomposition if used according to specifications.*

### 10.2. Chemical Stability

*Stable if used according to specifications.*

### 10.3. Possibility of Hazardous Reactions

*None if handled and stored according to specifications.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*May form hazardous decomposition products when exposed to high temperatures.*

*Thermal decomposition:*

### 10.5. Incompatible Materials

*Strong acids, strong bases and strong oxidizing agents.*

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10.6. Hazardous Decomposition Products

*None if stored and handled according to specifications.*

10.7. Further Information

### 11. Toxicological Information

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

*Acute Toxicity*

*Exposure to airborne concentrations above the legal or recommended limits may cause irritation of the nose, throat and lungs.*

*Practically not toxic after a single oral exposure. The statement is derived from the properties of the individual components.*

*LD50, oral:*

*> 2000 mg/kg (rat)*

*LD50, dermal:*

*not determined*

*LC50, inhalation:*

*not determined*

*Primary effects*

*Irritant effect on skin:*

*Non irritating (rabbit)*

*Irritant effect on eyes:*

*Non-irritating to eyes (rabbit)*

*Inhalation:*

*No information available.*

*Ingestion:*

*No information available*

*Sensitization:*

*Non sensitizing (guinea pig; OECD 406).*

*Mutagenicity:*

*No mutagenic effects observed.*

*Reproductive toxicity:*

*No negative effects.*

*Carcinogenicity:*

*No negative effects.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*Single exposure: no information available.*

*Repeated exposure: no information available.*

*Aspiration hazard:*

*Not applicable*

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### 11. 2. Information on other Hazards

*Endocrine Disrupting Properties: no information available.*

## 12. Ecological Information

### 12. 1. Aquatic Toxicity

#### *Fish toxicity:*

*Hydrogen-[29H,31H-phthalocyanine sulfonate(3)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1): LC50: 0.1-1 mg/l (96h, fish)*

#### *Daphnia toxicity:*

*EC50: 10 - 100 mg/l (48h, Daphnia magna)  
Hydrogen-[29H,31H-phthalocyanine sulfonate(3)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1): EC50: 0.1-1 mg/l (48h, Daphnia magna)*

#### *Bacteria toxicity:*

*Hydrogen-[29H,31H-phthalocyanine sulfonate(3)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1): EC10 > 1000 ml/l (3h, active sludge)*

#### *Algae toxicity:*

*Hydrogen-[29H,31H-phthalocyanine sulfonate(3)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1): EC50: 0.1-1 mg/l (96h, algae); EC50: < 1 mg/l (2h, Nitrosomonas sp.)*

### 12. 2. Persistency and Degradability

*Very insoluble product and can thus be removed from water mechanically in suitable effluent treatment plants.*

### 12. 3. Bioaccumulation

*Hydrogen-[29H,31H-phthalocyanine sulfonate(3)-N29,N30,N31,N32] cuprate(1-), compound with dodecylamine (1:1): Bioconcentration factor (BCF): < 3.6 (low)*

### 12. 4. Mobility

*No data available.*

### 12. 5. Results of PBT- und vPvP Assessment

*According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): this product is neither a PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative/very toxic) substance nor does it contain a PBT or vPvB substance.*

### 12. 6. Endocrine Disrupting Properties

*No data available.*

### 12. 7. Other Adverse Effects

#### *Water hazard class:*

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

#### *Behaviour in sewage systems:*

*No impairment of the biodegradability of active sludge expected  
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*when small amounts are discharged in biological sewage plants.*

*Further ecological effects:*

*The product contains copper bound as a complex.  
The product does not contain any substances which can deplete the ozone layer, according to Section I of EC-Directive 2037/2000/EC.*

*AOX Value:*

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### 13. Disposal Considerations

#### 13.1. Waste Treatment Methods

*Product:*

*Disposal should be avoided or minimized.  
Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.  
Dispose of surpluses and products unsuitable for recycling via a recognized waste disposal company. Do not discharge waste untreated into the sewage system unless all applicable regulations of the authorities are complied with.*

*European Waste Code (EWC):*

*040216 - Dyestuffs and pigments containing hazardous substances*

*Uncleaned packaging:*

*Non contaminated packaging can either be recycled or utilized for energy (incineration).  
Incineration or landfill should only be considered if recycling is not feasible.  
Contaminated packaging must be treated like the substance.  
Containers contaminated by the product must be disposed of in accordance with local and national legal regulations.  
Waste and containers must be disposed of in a secure manner.  
Exercise caution when handling empty containers that have not been cleaned or rinsed. Empty containers and linings may contain product residue. Avoid spreading and runoff of released material and contact with soil, water, drains, and sewers.*

*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 / DOT (US) (land transportation).*

*IMDG/IATA:*

*Not hazardous goods*

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14. 3. Transport Hazard Classes
- ADR Class:*
- not applicable*
- Hazard no.:*
- Classification code:*
- Tunnel restriction code:*
- IMDG Class (sea):*
- not applicable*
- Hazard no.:*
- EmS No.:*
- IATA Class:*
- not applicable*
- Hazard no.:*
14. 4. Packaging Group
- ADR/RID:*
- not applicable*
- IMDG:*
- IATA:*
14. 5. Environmental Hazards
- None*
14. 6. Special Precautions for User
- Not classified as a dangerous good under transport regulations.*
14. 7. Maritime Transport in Bulk according to IMO Instruments
- not applicable*
14. 8. Further Information
- Not classified as a dangerous good under transport regulations.*

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### 15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture
- Water hazard class:*
- 1, slightly hazardous for water (according to the German Regulation AwSV)*
- Local regulations on chemical accidents:*
- Does not underlie the Accident Ordinance.*
- 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*

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### *Technical instructions on air quality:*

5.2.2.: 99 % (Clase III); 5.2.1: 1 %

#### 15. 2. Chemical Safety Assessment

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

#### 15. 3. Further Information

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

*Regulation (EC) 2024/590 - 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*

*Listed in the following inventories:*

*TSCA (US), AIIIC (AUS), DSL (CA), ISHL (JP), KECI (KR), PICCS (PH), NZIoC (NZ), IECSC (CN), TSCI (TW)*

*VOC Content: not applicable*

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### 16. Other Information

*CEPE Code: 1*

*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.*