

# Material Safety Data Sheet

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



## 45750 Cobalt Blue Turquoise Light

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Revised edition: 17.11.2015

Version: 09

Printed: 19.01.2016

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

#### 1.1. Product Identifier

*Product Name:* Cobalt Blue Turquoise Light

*Article No.:* 45750

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

*Identified uses:*

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.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 EC Regulation 1272/2008*

*This product does not require classification and labelling as hazardous according to CLP/GHS.*

*Classification according to EC Regulation No. 67/548 or No. 1999/45*

*The material is not subject to classification according to EC lists.*

*Safety Phrases:*

*Possible Environmental Effects:*

#### 2.2. Label Elements

*Classification according to EC Regulation 1272/2008*

*No classification required according to the CLP/GHS guidelines.*

*Hazard designation:*

*Not applicable.*

*Signal word:*

*Hazard designation:*

*Safety designation:*

*Hazardous components for labelling:*

#### 2.3. Other Hazards

### Composition/Information on Ingredients

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### 3.

#### 3.1. Substance

#### 3.2. Mixture

*Chemical Characterization:* Cobalt aluminate blue spinel, Pigment Blue 28, C.I. 77346  
REACH Reg. No. 01-2119963940-31-0013

*Hazardous Ingredients:*

Cobalt aluminate blue spinel	100 %	CAS-Nr: 1345-16-0
		EINECS-Nr: 310-193-6
		EC-Nr:

*Additional information:*

*This product is made by means of a high temperature calcination of individual components. Due to its unique crystalline structure, the properties of this product must not correspond to those of the individual metals and oxides.*

### 4. First Aid Measures

#### 4.1. Description of the First Aid Measures

*General information:*

*In case of an accident or if you feel unwell, seek medical advice immediately (show the label where possible).*

*After inhalation:*

*Supply fresh air. If required give artificial respiration. Keep patient warm.*

*Oxygen therapy in case of impaired breathing.  
If breathing is difficult call a physician.*

*After skin contact:*

*Wash with soap and rinse with plenty of water.  
If irritation continues consult a physician.*

*After eye contact:*

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

*After ingestion:*

*Rinse mouth with water and give plenty of water to drink. Consult a physician. Never give anything by mouth to an unconscious person.  
Do not induce vomiting.*

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

*Symptoms:*

*Irritates eyes, skin and respiratory system.*

*Effects:*

#### 4.3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*No further information available.*

### 5. Fire-Fighting Measures

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### 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:*

*Product is not flammable.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*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:*

*Avoid formation of dust, wear protective clothing.  
Ensure adequate ventilation.*

### 6.2. Environmental Precautions

*Environmental precautions:*

*Prevent contamination of soil, drains and surface waters.*

### 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

*See Section 13 for information on disposal.  
Protective clothing, see Section 8.*

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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.  
Provide adequate ventilation.*

*Hygienic measures:*

*Do not eat or drink during work. Do not smoke.  
Wash thoroughly after handling.*

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

*Storage conditions:*

*Store the product in the original tightly sealed containers in a dry and cool place.*

*Requirements for storage areas and*

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*containers:*

*Store product in closed containers.*

*Information on fire and explosion protection:*

*Storage class (VCI):*

*Further Information:*

### 7.3. Specific End Use(s)

*No detailed information on use is given, as no exposure scenarios according to Article 14.4 Regulation (EC) 1907/2006 are required.*

*Further information:*

## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*none known*

*Parameters to be controlled (EC):*

*Cobalt metal, dust and fumes (as Co)*

*TWA (Portugal): 0.02 mg/m<sup>3</sup>*

*Lithium Compounds: 2 - 7 %*

*Derived No-Effect Level (DNEL):*

*Predicted No-Effect Concentration (PNEC):*

*Additional Information:*

*Biological limit value:*

*Cobalt: FR: 15 µg/l (urine), 1 µg/l (blood); HU: 0.03 mg/g (creatinine in urine), 0.058 µmol/mmol (creatinine in urine); ES: 15 µg/l (urine), 1 µg/l (Blut); CH: 30 µg/l (urine)*

*Cobalt metal, dust and fumes: FR: 15 µg/l (urine), 1 µg/l (blood); HU: 0.03 mg/g (creatinine in urine); ES: 15 µg/l (urine), 1 µg/l (Blut); CH: 30 µg/l (urine)*

### 8.2. Exposure Controls

*Technical protective measures:*

*While working with the product, the air at the work station has to be controlled and the exposed person observed.*

*Facilities storing or utilizing this material should be equipped with an eyewash facility.*

*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:*

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

*Hand protection:*

*Protective gloves*

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*Protective glove material:*

*Nitrile rubber (NBR), polyvinyl chloride (PVC).*

*Eye protection:*

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

*Body protection:*

*Safety shoes.*

*Environmental precautions:*

*Avoid spilling and release of product. Follow the national emission regulations.*

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### 9. Physical and Chemical Properties

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

*Form:*

*powder*

*Color:*

*blue-green*

*Odor:*

*odorless*

*Odor threshold:*

*No information available.*

*pH-Value:*

*10. (Shephard Color Test 101)*

*Melting temperature:*

*not applicable*

*Boiling temperature:*

*not applicable*

*Flash point:*

*not applicable*

*Evaporation rate:*

*not applicable*

*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:*

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

*Solubility in water:*

*practically insoluble*

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

*not applicable*

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*Auto-ignition temperature:*

*not applicable*

*Decomposition temperature:*

*not applicable*

*Viscosity, dynamic:*

*not available*

*Explosive properties:*

*not applicable*

*Oxidizing properties:*

*none*

*Bulk density:*

*3.69 kg/l*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

---

## 10. Stability and Reactivity

### 10.1. Reactivity

*No information available.*

### 10.2. Chemical Stability

*Stable if used according to specifications.*

### 10.3. Possibility of Hazardous Reactions

*Hazardous polymerisation will not occur.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Avoid formation of dust.*

*Thermal decomposition:*

### 10.5. Incompatible Materials

*None known.*

### 10.6. Hazardous Decomposition Products

*None known.*

### 10.7. Further Information

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## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

*Acute Toxicity*

*LD50, oral:*

*> 10000 mg/kg (rat)*

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*LD50, dermal:*

*No information available.*

*LC50, inhalation:*

*No information available.*

*Primary effects*

*Irritant effect on skin:*

*Dust may cause irritation.*

*Irritant effect on eyes:*

*Dust may irritate eyes.*

*Inhalation:*

*Can cause irritation of the respiratory system.*

*Ingestion:*

*Not classified as harmful.*

*Sensitization:*

*No sensitizing effects known.*

*Mutagenicity:*

*No mutagenic effects known.*

*Reproductive toxicity:*

*No data available.*

*Cancerogenity:*

*Cobalt Compound:  
IARC: Group 2B: Possible carcinogenic to humans.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*No data available.*

*Additional toxicological information:*

*Repeated exposure can cause irritation of the eyes, skin and respiratory tract.*

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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

*Not biodegradable.*

### 12.3. Bioaccumulation

*No bioaccumulation.*

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### 12. 4. Mobility

*No information available.*

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

*Not applicable.*

### 12. 6. Other Adverse Effects

*Water hazard class:*

*Not hazardous.*

*Behaviour in sewage systems:*

*Further ecological effects:*

*There are no data available on the product itself.*

*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):*

*Uncleaned packaging:*

*Packaging may be disposed of in the same manner as the product.*

*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 no.:*

*IMDG Class (sea):*

*Hazard no.:*

*EmS No.:*

*IATA Class:*

*not applicable*

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*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. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

*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:*

*0, not hazardous*

*Local regulations on chemical accidents:*

*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*

*Technical instructions on air quality:*

### 15. 2. Chemical Safety Assessment

*No information available.*

### 15. 3. Further Information

*Listed in:*

*EINECS (310-193-6), TSCA (US), AICS (AUS), DSL (CA), ENCS (JP), ECL (KR), PICCS (PH), IECSC (CN), NZIoC (NZ)*

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

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

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

## 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.*