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

45700  Cobalt Blue Dark

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

1.1. Product Identifier

*Product Name:* Cobalt Blue Dark

*Article No.:* 45700

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

*Identified uses:* Industrial application

*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

*EMail:* info@kremer-pigmente.de

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)*

<table>
<thead>
<tr>
<th>Hazard statement</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>May cause an allergic skin reaction.</td>
<td>1</td>
</tr>
</tbody>
</table>

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

*Safety Phrases:

Possible Environmental Effects:

2.2. Label Elements

*Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)*

*Hazard designation:*

GHS07-1

*Signal word:* Warning

*Hazard designation:*

H317 May cause an allergic skin reaction.

*Safety designation:
According to regulation (EC) No. 1907/2006 (REACH)

45700 Cobalt Blue Dark

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ clothing/ eye/ face protection.
P333+P313 If skin irritation or rash occurs: Get medical attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/ container according to regional, national and international regulations.

Hazardous components for labelling:

2.3 Other Hazards

3. Composition/Information on Ingredients

3.1 Substance

3.2 Mixture

Chemical Characterization: (Co,Zn)2SiO4, Pigment Blue 74, C.I. 77366

Information on Components / Hazardous Ingredients:

<table>
<thead>
<tr>
<th>Substance/Ingredient</th>
<th>Concentration</th>
<th>CAS-Nr</th>
<th>EINECS-Nr</th>
<th>EC-Nr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobalt zinc silicate blue phenacite (H317); REACH Reg. No. 01-2120756267-47-0000</td>
<td>50 - 100 %</td>
<td>68412-74-8</td>
<td>270-208-6</td>
<td></td>
</tr>
</tbody>
</table>

Additional information:

4. First Aid Measures

4.1 Description of the First Aid Measures

General information:

Do not leave affected persons unattended.

After inhalation:

Take affected person to fresh air.

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

Consult physician if symptoms persist.

After skin contact:

Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.

After eye contact:

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

Seek medical attention if irritation persists.

After ingestion:

Rinse mouth with water and drink plenty of water.

Do not give milk or alcohol to drink.

Never give anything by mouth to an unconscious person.

If symptoms persist consult physician.

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: First-aid measures must be specified together with the responsible physician for industrial medicine.

5. Fire-Fighting Measures

5.1 Extinguishing Media

Suitable extinguishing media: Use extinguishing media for surrounding fire.

Unsuitable extinguishing media: Water with full jet.

5.2 Special Hazards arising from the Substance or Mixture

Special hazards: Usual measures for chemical fires.

5.3 Advice for Firefighters

Protective equipment: Wear self-contained respiratory protective device.

Further information: Avoid contamination of sewage system, open water ways and ground water.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions: Wear protective clothing. 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.

7. Handling and Storage

7.1 Precautions for Safe Handling

Instructions on safe handling: Avoid formation of dust. Do not inhale dust. Wear adequate protective clothing (see para. 8).

Hygienic measures: Do not eat or drink during work. Do not smoke.
7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions: Store in tightly sealed containers in a dry and cool room.

Requirements for storage areas and containers: Electrical installation/working materials must comply with the technological safety standards.

Information on fire and explosion protection: Avoid dust formation.

Storage class (VCI): 13; Non combustible solids

Further Information:

7.3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE): TRGS 900

TLV: 0.10 mg/m³ (inhalable dust fraction) based on cobalt.

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures: Use appropriate local exhaust ventilation to control airborne levels. Technical protective measures have priority to personal protective measures.

Personal Protection

General protective measures: The usual precautionary measures are to be adhered to when handling chemicals. Do not inhale vapor/dust. Wash hands before breaks and after work.

Respiratory protection: Not required.

Hand protection: Protective gloves (EN 374)

Protective glove material:
Eye protection: Safety glasses (EN 166)

Body protection: Protective clothing.

Environmental precautions: No special measures required.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: solid
Color: blue
Odor: odorless
Odor threshold: No information available.

pH-Value: not available

Melting temperature: not available

Boiling temperature: not applicable

Flash point: not applicable

Evaporation rate: not applicable

Flammability (solid, gas): not available

Upper explosion limit: no information available

Lower explosion limit: no information available

Vapor pressure: not determined

Vapor density: No information available.

Density: not determined

Solubility in water: No data available

Coefficient of variation (n-Octanol/Water): not applicable

Auto-ignition temperature:
Decomposition temperature: No data available.

Viscosity, dynamic: not applicable

Explosive properties: not available

Oxidizing properties: No information available.

Bulk density: not determined

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

Particle size:

Other information: No further information.

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

No decomposition 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: No information available.

Thermal decomposition:

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None if stored and handled according to specifications.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity
LD50, oral: 
No information available.

LD50, dermal: 
No information available.

LC50, inhalation: 
No information available.

Primary effects
Irritant effect on skin: 
Non irritating

Irritant effect on eyes: 
Non-irritating to eyes

Inhalation: 
No information available.

Ingestion: 
No information available

Sensitization: 
May cause allergic skin reactions.
Cobalt zinc silicate blue phenacite: may cause allergic skin reactions (mouse; OECD 429).

Mutagenicity: 
No relevant data found.

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: 
No information available.

12. Ecological Information
12.1. Aquatic Toxicity

Fish toxicity: 
No toxicity expected.

Daphnia toxicity: 

Bacteria toxicity: 

Algae toxicity: 

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

On the basis of available data, the product does not contain and PBT or vPvB in percentage greater than 0.1 %.

12. 6. Other Adverse Effects

Water hazard class:

1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:

Further ecological effects:

No ecological data available.

AOX Value:

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.:

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.:
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45700 Cobalt Blue Dark

Revised edition: 30.05.2018 Printed: 19.06.2018
Version: 2.0

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: 1, slightly hazardous for water (German Regulation)
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
Technical instructions on air quality: Classification II: 100 % inorganic dust

15. 2. Chemical Safety Assessment
A Chemical Safety Assessment has been carried out for this product.
EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)

15. 3. Further Information
EC. REACH, Annex XIV, Candidate List of Substances of very High Concern (SVHC): not regulated / not applicable
Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: Not applicable
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
Listed in the following inventories:
TSCA (US), REACH (EU), AICS (AUS), DSL (CA), ENCS (JP),
KECI (KR), PICCS (PH), NZIoC (NZ), INV (CH), IECSC (CN), INV
(MY), INV (TR), INV (TW)

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.