

Safety Data Sheet

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



45364 Copper Blue

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Revised edition: 12.12.2018

Version: 6.3

Printed: 01.04.2020

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

1.1. Product Identifier

Product Name: Copper Blue

Article No.: 45364

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.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:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

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

*Acute toxicity (oral), hazard category 4
Skin irritation, hazard category 2
Serious eye damage, hazard category 1
Acute aquatic toxicity, hazard category 1
Chronic aquatic toxicity, hazard category 1*

H302 Harmful if swallowed.

Cat.: 4

H315 Causes skin irritation.

Cat.: 2

H318 Causes serious eye damage.

Cat.: 1

H410 Very toxic to aquatic life with long lasting effects.

Cat.: 1

Possible Environmental Effects:

2.2. Label Elements

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

Hazard designation:

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GHS05-2



GHS07



GHS09

Signal word:

Danger

Hazard designation:

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H410	Very toxic to aquatic life with long lasting effects.

Safety designation:

P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ clothing/ eye/ face protection.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.
P310	Immediately call a poison center or physician.
P391	Collect spillage
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: Inorganic

Information on Components / Hazardous Ingredients:

Di copper hydroxide phosphate (H302-400-411); REACH Reg. No. 012119979098-20-0000	50 - 70 %	CAS-Nr: 12158-74-6 EINECS-Nr: 235-285-2 EC-Nr:
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Phosphoric acid, copper salt (1:1) monohydrate (H315-318-400-410)	30 - 50 %	CAS-Nr: 35723-09-2 EINECS-Nr: EC-Nr:
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Additional information:

First Aid Measures

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4.

4.1. Description of the First Aid Measures

General information:

*Take person away from hazardous area.
Do not leave affected persons unattended.
Never give anything by mouth to an unconscious person.*

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

*Wash with soap and rinse with plenty of water.
If symptoms persist, consult a physician.*

After eye contact:

*Rinse open eyes with plenty of water for at least 15 minutes.
Seek medical attention if irritation persists.
Small splashes in the eyes can cause irreversible tissue lesions and blindness.
Continue flushing during transport to hospital.
Remove contact lens.
Protect unharmed eye.*

After ingestion:

*Rinse mouth with water and drink plenty of water.
Do not give milk or alcoholic beverages to drink.
If symptoms persist, call a physician.*

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

Symptoms:

*Skin irritant.
Eye contact: causes serious eye damage.
Harmful if swallowed.*

Effects:

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

Treatment:

For further advice of a specialist, the physician should contact a poison control center.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

Special hazards:

No special hazards.

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5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

Contaminated extinguishing water and debris should be disposed of according to local regulations.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Wear protective clothing.

Keep unprotected persons out of danger zone.

Ensure adequate ventilation.

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soils, drains and surface water.

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:

Provide adequate ventilation.

Avoid formation of dust.

Hygienic measures:

Avoid contact with skin, eyes and clothing. Do not inhale dust.

Do not eat or drink during work. Do not smoke.

Remove contaminated clothing before entering dining areas.

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:

Store the product in the original container.

Information on fire and explosion protection:

Follow the usual measures for preventive fire protection.

Electrical installations / working materials must comply with the

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technological safety standards.

Avoid dust formation.

No smoking!

Storage class:

13; Non combustible solids (TRGS 510)

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):

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:

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

Eyewash bottle with pure water.

Personal Protection

General protective measures:

Take off contaminated clothing immediately. Store working clothing separately.

Do not inhale dust. Do not eat, drink or smoke while working.

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Respiratory protection:

Required in case of insufficient ventilation.

Recommended: Particle filter P

Hand protection:

Protective gloves (EN 374)

Protective glove material:

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

Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time.

Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

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Environmental precautions:

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>blue</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>5 - 6 (10 g/l, 20°C)</i>
<i>Melting temperature:</i>	<i>not determined</i>
<i>Boiling temperature:</i>	<i>not determined</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>not flammable</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>not determined</i>
<i>Solubility in water:</i>	<i>3 g/l (20°C) slightly soluble</i>
<i>Coefficient of variation (n- Octanol/Water):</i>	
<i>Auto-ignition temperature:</i>	<i>Product is not auto-ignitable.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>
<i>Explosive properties:</i>	

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Product does not present an explosion hazard.

Oxidizing properties:

no information available

Bulk density:

ca. 550 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

1

Solvent content:

Solid content:

Particle size:

Other information:

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

Unknown.

10.4. Conditions to Avoid

Conditions to avoid:

No decomposition if used according to specifications.

Thermal decomposition:

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

No information available.

10.7. Further Information

Corrosion of metals: not corrosive.

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

871.38 mg/kg (rat)

Di copper hydroxide phosphate: 300 - 2000 mg/kg (OECD 423)

Harmful if swallowed.

LD50, dermal:

Di copper hydroxide phosphate: > 2000 mg/kg (OECD 402)

LC50, inhalation:

Di copper hydroxide phosphate: > 5.09 mg/l (4h, rat; OECD 403)

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Primary effects

Irritant effect on skin:

Irritating to skin.

Di copper hydroxide phosphate: no irritating effect (OECD 404)

Phosphoric acid, copper salt (1:1) monohydrate: strong irritant effect

Irritant effect on eyes:

Causes severe eye damage: irreversible damage.

Di copper hydroxide phosphate: not irritating (OECD 405)

Phosphoric acid, copper salt (1:1) monohydrate: irreversible damage to eyes

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effects known.

Di copper hydroxide phosphate: non sensitizing (OECD 406)

Mutagenicity:

Di copper hydroxide phosphate:

Gentoxizität in vitro: Ames-Test negative (Escherichia coli; OECD 471)

In vitro genetic-toxicity: Ames-Test negative (Salmonella typhimurium; OECD 471)

In vitro Mammalian Cell Micronucleus Test (OECD 487): negative

In vitro genetic-toxicity: negative (OECD 476, mouse lymphoma cells)

Reproductive toxicity:

No negative effects.

Carcinogenicity:

No negative effects.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

Aspiration hazard: not applicable

12. Ecological Information

12.1. Aquatic Toxicity

Phosphoric acid, copper salt (1:1) monohydrate:

Acute aquatic toxicity: very toxic to aquatic organisms.

Chronic aquatic toxicity: toxic to aquatic organisms, with long-term adverse effects.

Fish toxicity:

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No data available.

Daphnia toxicity:

No information available.

Bacteria toxicity:

no information available

Algae toxicity:

*Di copper hydroxide phosphate:
EC50: > 0.171 mg/l; NOEC: > 0.602 mg/l (72h,
Pseudokirchneriella subcapitata; OECD 201)*

12.2. Persistency and Degradability

Inorganic substance. Biological degradability is not affected.

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:

3, hazardous

Behaviour in sewage systems:

Further ecological effects:

*Do not let product enter waterways or sewage system.
Avoid subsoil penetration. Prevent product from entering drains.
Do not contaminate surface water.*

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

*This material may only be discarded by an authorized disposal
company.*

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA

3077

14.2. UN Proper Shipping Name

ADR/RID:

UMWELTGEFÄHRDENDER STOFF, FEST, N.A.G.

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(Dikupferhydroxidphosphat, Dikupferphosphat Monohydrat)

IMDG/IATA:

*ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Dicopper hydroxide phosphate, Phosphoric acid, copper salt,
monohydrate)*

14.3. Transport Hazard Classes

ADR Class: 9
Hazard no.: 9
Classification code: M7
Tunnel restriction code: -
IMDG Class (sea): 9
Hazard no.: 9
EmS No.: F-A, S-F
IATA Class: 9
Hazard no.: 9

14.4. Packaging Group

ADR/RID: III
IMDG: III
IATA: III

14.5. Environmental Hazards

*Classification as environmentally hazardous according 2.9.3
IMDG: yes
Labelling according 5.2.1.8 ADR/RID: fish and tree*

14.6. Special Precautions for User

not applicable

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:

*3, very hazardous for water (according to the German Regulation
AwSV)*

Local regulations on chemical accidents:

Seveso-III Directive (2012/18/EU): E1

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:

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Classification III: 57.38 % inorganic dust.

15.2. Chemical Safety Assessment

No information available.

15.3. Further Information

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

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