

Material Safety Data Sheet

Pigment Blue 15

1. Identification

Product identifier used on the label

Pigment Blue 15

Recommended use of the chemical and restriction on use

Recommended use*: colourant(s)

Suitable for use in industrial sector: chemical industry

Details of the supplier of the safety data sheet

Dongguan Baoxu Chemical Technology.,ltd.

Caijin Business Bldg DongGuan CN 523071

+86 0769 22821082 Fax 86 0769 22821083

www.additivesforpolymer.com

Other means of identification

Chemical family: copper-phthalocyanine pigment

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200 Classification of the product

Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Signal Word:

Warning

Hazard Statement:

May form combustible dust concentration in air.

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200 Emergency overview

NOTICE:

May cause mechanical irritation to eyes, skin and respiratory system.

Avoid inhalation of dusts.

Use with local exhaust ventilation.

Use NIOSH approved respirator as needed to mitigate exposure.

Take precautionary measures against static discharges.

3. Composition / Information on Ingredients

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
147-14-8	>= 80.0 - <= 100.0 %	C.I. Pigment Blue 15
68411-06-3	>= 1.0 - <= 5.0 %	Copper, (29H,31 H-phthalocyaninato(2-)-N29,N30,N31,N32)-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl derivs.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If irritation develops, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Hazards during fire-fighting: harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters /ground water.

Methods and material for containment and cleaning up

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Closed containers should only be opened in well-ventilated areas. Avoid dust formation. Do not use any sparking tools.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

~~Conditions for safe storage, including any incompatibilities~~

8. Exposure Controls/Personal Protection

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Wear chemical resistant protective gloves.

Eye protection:

Safety glasses with side-shields.

Body protection:

9. Physical and Chemical Properties

Form:	powder
Odour:	almost odourless
Odour threshold:	No applicable information available.

Colour:	blue	
pH value:	5 - 9	(10 g/l) (as aqueous suspension)
Melting point:	480 °C	(1,013 hPa)
Boiling point:		not determined
Flash point:		Study does not need to be conducted.
Flammability:	not highly flammable	
Lower explosion limit:		For solids not relevant for classification and labelling
Upper explosion limit:		For solids not relevant for classification and labelling
Vapour pressure:		not applicable
Relative density:	approx. 1.6	
Bulk density:	250 - 600 kg/m ³	
Vapour density:		The product is a non-volatile solid.
Partitioning coefficient octanol/water (log Pow):		Study scientifically not justified.
		Study scientifically not justified.
Self-ignition temperature:	> 350 °C	(VDI 2263, sheet 1, 1.4.1)
Thermal decomposition:	No decomposition if correctly stored and handled.	
Viscosity, dynamic:		Study does not need to be conducted.
Particle size:		No data available.
Solubility in water:		insoluble
Solubility (quantitative):		insoluble
Evaporation rate:		The product is a non-volatile solid.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties: not fire-propagating

Minimum ignition energy:

(DIN EN 13821)

The product is capable of dust explosion.

Chemical stability

Peroxides: 0 %

The product does not contain peroxides.

Possibility of hazardous reactions

The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.

Conditions to avoid

Avoid dust formation. Avoid deposition of dust. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if correctly stored and handled.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50 Species: rat Value: > 5,000 mg/kg

Inhalation

Study scientifically not justified.

Dermal

Type of value: LD50 Species: rat Value: > 2,000 mg/kg

Assessment other acute effects Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Skin

Species: rabbit Result: non-irritant Method:

Eye

Species: rabbit

Result: non-irritant
Method: -Test

Sensitization

Assessment of sensitization: The chemical structure does not suggest a sensitizing effect.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No adverse effects were observed after repeated exposure in animal studies.

Genetic toxicity

Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in microorganisms.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: No teratogenic effects reported.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information Further important symptoms and effects are so far not known.

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish

LC50 (96 h) > 500 mg/l, *Leuciscus idus*

Aquatic invertebrates

EC50 (48 h) > 500 mg/l, *Daphnia magna*

Aquatic plants EC50 (72 h), algae not determined

Chronic toxicity to fish No data available.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) > 1 mg/l, Daphnia magna (OECD Guideline 211, semistatic) The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DIN 38412 Part 27 (draft) bacterium/EC50: > 1,000 mg/l **Persistence and degradability**

Assessment biodegradation and elimination (H₂O)

Well eliminable from water by adsorption on activated sludge. The product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants.

Bioaccumulative potential

Assessment bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Bioaccumulation potential

Study scientifically not justified.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information**Federal Regulations Registration status:**

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Fire (Combustible Dust);**EPCRA 313:****CAS Number Chemical name**

68411-06-3 Copper, (29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32)-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl derivs.

State regulations**State RTK****CAS Number Chemical name**

NJ	147-14-8	C.I. Pigment Blue 15
NJ	68411-06-3	Copper, (29H,31 H-phthalocyaninato(2-)-N29,N30,N31,N32)-, (1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)methyl derivs.

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

16. Other Information**SDS Prepared by:**