

# Material Safety Data Sheet

## Pigment Blue 15:4

### 1. Identification

**Product identifier used on the label**

**Pigment Blue 15:4**

**Recommended use of the chemical and restriction on use**

Recommended use\*: colourant(s)

Suitable for use in industrial sector: Paints, lacquers and varnishes industry; plastics processing industry

**Details of the supplier of the safety data sheet**

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**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:

Hazard Statement:

May form combustible dust concentration in air.

#### **Hazards not otherwise classified**

The product is under certain conditions capable of dust explosion. Additional information on Classification and labelling in section 2: Classification and labelling were undertaken on the basis of tests on a preparation of similar composition.

#### **Composition / Information on Ingredients According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
147-14-8	>= 75.0 - < 100.0%	C.I. Pigment Blue 15
28654-73-1	>= 3.0 - < 5.0%	[N, N, N', N', N'', N''-Hexaethy   -29H, 31H-phthalocyaninetrimethylaminato(2-)-N29, N30, N31, N32]copper

#### **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

##### **If on skin:**

Remove contaminated clothing. Wash thoroughly with soap and seek medical attention.

##### **If in eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

##### **If swallowed:**

Rinse mouth and then drink plenty of water. Do not induce vomiting. Seek medical

##### **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.

##### **Indication of any immediate medical attention and special treatment needed**

##### Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## 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 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/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Avoid raising dust.

## 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.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Dust can form an explosive mixture with air.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Avoid all sources of ignition: heat, sparks, open flame.

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

C.I. Pigment Blue 15

ACGIH TLV TWA value 0.2 mg/m<sup>3</sup> fumes/smoke (copper (Cu)); TWA value 1 mg/m<sup>3</sup> Dust and mist

### Advice on system design:

Provide local exhaust ventilation to control dust.

### Personal protective equipment Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator.

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

### Hand protection:

Chemical resistant protective gloves

### Eye protection:

Safety glasses with side-shields. Wear face shield if splashing hazard exists.

### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Due to the colouring properties of the product closed work clothes should be used, to avoid stains during manipulation. Eye wash fountains and safety showers must be easily accessible.

Wash soiled clothing immediately.

### Physical and Chemical Properties

Form:	powder	odourless
Odour:	not determined	
Odour threshold:	dark blue	
Colour: pH	not soluble	
	> 130 °C Thermal decomposition above the indicated temperature is possible.	
Boiling point:	not determined	
Flash point:	Study does not need to be conducted. not highly flammable Product is combustible.	
Flammability:	For solids not relevant for classification and labelling.	
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Autoignition:	> 500 °C (BAM)	

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Density:	1.69 g/cm <sup>3</sup> (20 °C)
Relative density:	approx. 1.6
Bulk density:	204 kg/m <sup>3</sup>
Vapour density:	The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):	Study does not need to be conducted.
Self-ignition temperature:	not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	Study does not need to be conducted.
Particle size:	No data available.
Solubility in water:	insoluble
Solubility (quantitative):	insoluble
Solubility (qualitative):	soluble
	solvent(s): organic solvents.
Evaporation rate:	The product is a non-volatile solid.

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## 10. Stability and Reactivity

### Reactivity

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

Oxidizing properties:

not fire-propagating

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

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

### Conditions to avoid

See MSDS section 7 - Handling and storage.

### Incompatible materials

No substances known that should be avoided.

### Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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## 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

The product has not been tested. The statement has been derived from the properties of the individual components.

### Inhalation

Type of value: LC50

Study scientifically not justified.

### Dermal

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

The product has not been tested. The statement has been derived from the properties of the individual components.

### 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.

The product has not been tested. The statement has been derived from the properties of the individual components.

### Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.

### Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

The product has not been tested. The statement has been derived from the properties of the individual components.

### Eye

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

The product has not been tested. The statement has been derived from the properties of the individual components.

### Sensitization

Assessment of sensitization: The chemical structure does not suggest a sensitizing effect. No sensitizing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity: No mutagenic effects reported.

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

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**

### **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) > 100 mg/l, *Leuciscus idus*

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)

The product has not been tested. The statement has been derived from the properties of the individual components.

Aquatic plants EC50 (72 h), algae not determined

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) activated sludge/EC50:

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to

biological treatment plants in appropriate low concentrations.

### **Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O)

The product is virtually insoluble in water and can thus be treated in suitable effluent treatment plants.

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

### **Bioaccumulative potential**

Bioaccumulation potential

Study scientifically not justified.

### **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.

**RCRA:** NONE

### **14. Transport Information**

#### **Land transport**

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

28654-73-1

##### Chemical name

[N, N, N', N', N'', N''-Hexaethyl-29H, 31 H-phthalocyaninetrimethylaminato(2-)-N29, N30, N31, N32]copper

#### State

##### regulations

##### CAS Number

147-14-8  
28654-73-1

##### Chemical name

C.I. Pigment Blue 15  
[N,N,N',N',N'',N''-Hexaethyl-29H,31H-phthalocyaninetrimethylaminato(2-)-N29,N30,N31,N32]coppe

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C.I. Pigment Blue 15

28654-73-1

[N,N,N',N',N'',N''-Hexaethyl-29H,31H-phthalocyaninetrimethylaminato(2-)-N29,N30,N31,N32]copper

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