

# SAFETY DATA SHEET

Date Printed: 05/16/2024

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (4N) 99.99% Copper Phthalocyanine

**Product Code:** CU-PCIN-04-P

**CAS Number:** 147-14-8

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

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## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

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## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Synonyms : Phthalocyanine blue

Pigment Blue 15

CuPc

Formula : C<sub>32</sub>H<sub>16</sub>CuN<sub>8</sub>

Molecular weight : 576.07 g/mol

CAS-No. : 147-14-8

EC-No. : 205-685-1

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## **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

Most important symptoms and effects, both acute and delayed

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

No data available

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## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Copper oxides

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas.

For personal protection see section 8.

Environmental precautions

No special environmental precautions required.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

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## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Keep in a dry place.

Storage class (TRGS 510): 13: Non Combustible Solids

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Information on basic physical and chemical properties

a) Appearance Form: powder

b) Odour odourless

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point

350 °C (662 °F)

f) Initial boiling point and boiling range

No data available

g) Flash point ( )No data available

h) Evaporation rate No data available

i) Flammability (solid, gas)

No data available

j) Upper/lower flammability or explosive limits

No data available

k) Vapour pressure < 0.0001 hPa at 20 °C (68 °F)

l) Vapour density No data available

m) Relative density No data available

n) Water solubility No data available

o) Partition coefficient: n-octanol/water  
No data available  
p) Auto-ignition temperature  
356 °C (673 °F) at 1,013 hPa  
q) Decomposition temperature  
No data available  
r) Viscosity No data available  
s) Explosive properties No data available  
t) Oxidizing properties No data available  
Other safety information  
Solubility in other solvents  
Ethanol - insoluble

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity  
No data available  
Chemical stability  
Stable under recommended storage conditions.  
Possibility of hazardous reactions  
No data available  
Conditions to avoid  
No data available  
Incompatible materials  
Strong oxidizing agents  
Hazardous decomposition products  
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Copper oxides  
Other decomposition products - No data available  
In the event of fire: see section 5

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects  
Acute toxicity  
LD50 Oral - Rat - male and female - > 2,000 mg/kg  
(OECD Test Guideline 401)  
Inhalation: No data available  
LD50 Dermal - Rat - male - > 5,000 mg/kg  
(OECD Test Guideline 402)  
No data available  
Skin corrosion/irritation  
Skin - Rabbit  
Result: No skin irritation - 4 h  
(OECD Test Guideline 404)  
Serious eye damage/eye irritation  
Eyes - Rabbit  
Result: No eye irritation - 24 h  
(OECD Test Guideline 405)  
Respiratory or skin sensitisation  
Maximisation Test - Guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

Germ cell mutagenicity

Hamster

fibroblast

Result: negative

Ames test

S. typhimurium

Result: negative

Mouse - male and female

Result: negative

Mutation in mammalian somatic cells.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 1,000 mg/kg

RTECS: GL8510000

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## SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish mortality LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h

(OECD Test Guideline 203)

mortality LC50 - Cyprinus carpio (Carp) - > 100 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

Immobilization EC50 - Daphnia magna (Water flea) - > 500 mg/l - 48 h

(Directive 67/548/EEC, Annex V, C.2.)

Toxicity to algae static test EC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria Respiration inhibition EC50 - Sludge Treatment - > 10,000 mg/l - 3h  
(OECD Test Guideline 209)  
Persistence and degradability  
Biodegradability aerobic - Exposure time 28 d  
Result: 5 % - Not biodegradable  
(OECD Test Guideline 301C)  
Bioaccumulative potential  
No data available  
Mobility in soil  
No data available  
Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not  
conducted  
Other adverse effects  
No data available

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods  
Product  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Contaminated packaging  
Dispose of as unused product.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)  
Not dangerous goods  
IMDG  
Not dangerous goods  
IATA  
Not dangerous goods

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## **SECTION 15. REGULATORY INFORMATION**

SARA 302 Components  
No chemicals in this material are subject to the reporting requirements of SARA Title III,  
Section 302.  
SARA 313 Components  
This material does not contain any chemical components with known CAS numbers that  
exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section  
313.  
SARA 311/312 Hazards  
No SARA Hazards  
Massachusetts Right To Know Components  
No components are subject to the Massachusetts Right to Know Act.  
Pennsylvania Right To Know Components  
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper  
CAS-No.  
147-14-8

Revision Date  
2015-07-08  
New Jersey Right To Know Components  
29H,31H-Phthalocyaninato(2-)-N29,N30,N31,N32 copper  
CAS-No.  
147-14-8

Revision Date  
2015-07-08  
California Prop. 65 Components  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.  
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.