
[MATERIAL SAFETY DATA SHEET (MSDS)]

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

AUTHORIZED BY MDL FOR INTERNAL USE ONLY. FOR EXTERNAL USE, SEE SECTION 16.

FIRST COLOR CO., LTD.
1236-1, JEUNGWANG-DONG, SHIHUNG,
KYOUNGGI-DO, KOREA

EMERGENCY TELEPHONE NUMBER:
TEL : 82-31-432-6977
FAX : 82-31-432-6329

SUBSTANCE: COPPER PHTHALOCYANINE

TRADE NAMES/SYNONYMS: FIRST BLUE 1530
PIGMENT BLUE 15:3

CHEMICAL FAMILY: porphyrins

CREATION DATE: Apr 03 1986

REVISION DATE: Jun 17 2002

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: COPPER PHTHALOCYANINE

CAS NUMBER: 147-14-8

EC NUMBER (EINECS): 205-685-1

PERCENTAGE: 100.0

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=1 REACTIVITY=0

EC CLASSIFICATION (CALCULATED): Not determined.

EMERGENCY OVERVIEW:

COLOR: bright, blue

PHYSICAL FORM: crystals, solid

ODOR: odorless

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

SKIN CONTACT:

SHORT TERM EXPOSURE: no information is available

LONG TERM EXPOSURE: no information on significant adverse effects

EYE CONTACT:

SHORT TERM EXPOSURE: mechanical irritation

LONG TERM EXPOSURE: no information is available

INGESTION:

SHORT TERM EXPOSURE: no information on significant adverse effects

LONG TERM EXPOSURE: no information is available

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

SECTION 4 FIRST AID MEASURES

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Slight fire hazard. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: regular dry chemical, carbon dioxide, water, regular foam

Large fires: Use regular foam or flood with fine water spray.

FIRE FIGHTING: Move container from fire area if it can be done without risk.

Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire.

Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

OCCUPATIONAL RELEASE:

Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

SECTION 7 HANDLING AND STORAGE

Store and handle in accordance with all current regulations and standards.

Store in a tightly closed container. Keep separated from incompatible substances.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:

COPPER PHTHALOCYANINE:

No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a dust, mist, and fume filter.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid

APPEARANCE: lustrous

COLOR: bright, blue
PHYSICAL FORM: crystals, solid
ODOR: odorless
MOLECULAR WEIGHT: 576.08
MOLECULAR FORMULA: C₃₂-H₁₆-N₈.CU
BOILING POINT: Not applicable
MELTING POINT: 896 F (480 C)
SUBLIMATION POINT: >932 F (>500 C)
VAPOR PRESSURE: Not applicable
VAPOR DENSITY: Not applicable
SPECIFIC GRAVITY (water=1): 1.59
WATER SOLUBILITY: very slightly soluble
PH: Not applicable
VOLATILITY: Not applicable
ODOR THRESHOLD: Not available
EVAPORATION RATE: Not applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available
SOLVENT SOLUBILITY:
Soluble: nitrobenzenes, 1-chloronaphthalene, 98% sulfuric acid
Very Slightly Soluble: alcohol, hydrocarbons
Insoluble: solvents, dilute acids, alkali

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition.

Avoid contact with incompatible materials.

INCOMPATIBILITIES: oxidizing materials

COPPER PHTHALOCYANINE:

OXIDIZERS (STRONG): Fire and explosion hazard.

HAZARDOUS DECOMPOSITION:

Thermal decomposition products: oxides of carbon, nitrogen

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

COPPER PHTHALOCYANINE:

TOXICITY DATA:

>15 gm/kg oral-rat LD; >3 gm/kg intraperitoneal-rat LD

HEALTH EFFECTS:

INHALATION:

ACUTE EXPOSURE:

COPPER PHTHALOCYANINE: May cause irritation of the mucous membranes.

CHRONIC EXPOSURE:

COPPER PHTHALOCYANINE: No data available.

SKIN CONTACT:

ACUTE EXPOSURE:

COPPER PHTHALOCYANINE: No data available.

CHRONIC EXPOSURE:

COPPER PHTHALOCYANINE: Repeated contact may cause an allergic reaction.

EYE CONTACT:

ACUTE EXPOSURE:

COPPER PHTHALOCYANINE: Contact may cause mechanical irritation.

CHRONIC EXPOSURE:

COPPER PHTHALOCYANINE: No data available.

INGESTION:

ACUTE EXPOSURE:

COPPER PHTHALOCYANINE: The LD50 reported in rats was >5000 mg/kg.
Ingestion may result in gastric disturbances.

CHRONIC EXPOSURE:

COPPER PHTHALOCYANINE: No data available.

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: N

CHRONIC: N

FIRE: N

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 205-685-1

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 0 (Official German Classification)

SECTION 16 OTHER INFORMATION
