



OCI Company Ltd.

Material Safety Data Sheet

MSDS

Copper(II) Nitrate Trihydrate

Section 1 - Chemical Product and Company Identification

SUBSTANCE: Copper(II) Nitrate Trihydrate

Recommended use : Not available

Restriction of use : Not available

Company Identification

Company : OCI Company Ltd.

Address : 595 Hakik-dong, Nam-gu, Incheon, KOREA

Tel No. : 82 - 32 - 860 - 6114

Section 2 - Hazards Identification

- 1) Hazard Classification Oxidizing solid : 2
Acute toxicity (Oral) : 4
Acute hazard to the aquatic environment : 1
Chronic hazard to the aquatic environment : 1

2) Warning signal

Symbol



Signal word

Danger

Hazard statement

H272 May intensify fire; oxidizer
H302 Toxic if swallowed
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Prevention precautionary statements

P210 Obtain special instructions before use.
P220 Keep/Store away from clothing/combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.
P370+P378 In case of fire: Use water for extinction.
P391 Collect spillage.
P501 Dispose of contents/container to the related laws.

3) NFPA
Health Rating 3
Flammability Rating 0
Reactivity Rating 0

Section 3 - Composition, Information on Ingredients

COMPONENT: Copper(II) Nitrate Trihydrate
CAS No.: 10031-43-3
PERCENTAGE : 100%

Section 4 - First Aid Measures

Inhalation:

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

Ingestion:

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

Skin Contact:

Wash off with soap and plenty of water. Consult a physician.

Eye Contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Section 5 - Fire Fighting Measures

Fire Extinguishing Media:

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

Special hazards arising from the substance or mixture:

Nitrogen oxides (NOx), Copper oxides

Protection of firefighters:

Wear self contained breathing apparatus for firefighting if necessary.

Section 6 - Accidental Release Measures

Methods and materials for containment and cleaning up :

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Storage:

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

Hygroscopic heat sensitive. Moisture sensitive.

Handling:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition.

- No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

Section 8 - Exposure Controls, Personal Protection

Exposure control:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Eye / face protection:

Face shield and safety glasses 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.

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: Blue

Odor: odorless

pH: 4.0 (Aqueous solution)

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: Not available

Freezing/Melting Point: 115 °C

Decomposition Temperature: 170 °C

Solubility: 138% at 0 °C (Water)

Specific Gravity/Density: 2.32

Molecular Formula: CuH6N2O9

Molecular Weight: 241.60

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Incompatibilities with Other Materials:

Reducing agents, Organic materials, Powdered metals.

Hazardous Decomposition Products:

Not available

Section 11 - Toxicological Information

Acute Oral LD50 Rat: 940 mg/kg

Section 12 - Ecological Information

Ecotoxicity: Harmful to aquatic life. Crustacean : EC50 0.0095 mg/L 48 hr

Section 13 - Disposal Considerations

Disposal instructions

Dispose of contents/container in accordance with local/regional/national/international regulations.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

Proper Shipping Name: NITRATES, INORGANIC, N.O.S

Hazard Class: Class 5.1

UN No. 1477

Packing Group: II

Section 15 - Regulatory Information

EU REACH	Not regulated
USA TSCA	Not regulated
USA CERCLA Reportable Quantities	Not regulated
Japan CSCL	Not regulated

Section 16 - Other Information

Sources : KOSHA, National Emergency Management Agency

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