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| **Substance**  | **Copper and copper salts** | **UN No: 3077****Transport Cat: 9** | **University Hazard Classification** | **Medium** |
| **Activity** | Crystallography, chemical reactions, minimal metal medium,  |
| **Handling Requirements e.g. fume cupboard, MSC, glove type etc.** | * Weigh out powder in fume cupboard (LEV). Avoid breathing in dusts, vapours and mists.
* Wear appropriate chemical resistant gloves (EN374) and tightly fitting safety goggles (EN166).
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| **Laboratory Info** | **Appropriate to the department (state lab number and containment level)** |
| **Additional Information** | * **Workplace exposure limits must not be exceeded**
* Copper Iodide (CAS 7681-65-4) TWA: 1 mg-m3, STEL: 2 mg-m3
* Copper (CAS 7440-50-8) TWA: 0.2 mg-m3
* Copper TWA: 1 mg-m3 , STEL: 2 mg-m3
* Copper Sulphate (CAS 7758-98-7) TWA (dusts and mists): 1mg-m3, STEL (dusts and mists): 2 mg-m3
* Copper (II) Nitrate Hydrate (CAS 13778-31-9)
* During a fire, hazardous decomposition products can be produced e.g. Hydrogen iodide, Copper oxides, sulphur oxides, borane/boron oxides
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| **Hazard Statements**H272H302H315H318H317H319H335H400H410 |  Causes serious eye damageMay cause an allergic skin reaction |  Harmful if swallowedCauses skin irritationMay cause respiratory irritation  | Very toxic to aquatic lifeVery toxic to aquatic life with long lasting effects | May intensify a fire: oxidiser |
|  |
| **Handling Precautions**P210P220P280P221 P301 + P312 + P330 P305 + P351 + P338 +P310P370 + P378 | Chemical resistant gloves EN 374 |  Tightly fitting safety goggles to EN 166 |  Protective clothing e.g. fastened lab coat  | Do not smoke.Do not use near naked flame or other heat source, sources of ignition.  |
| **Storage & Transport** | * Keep container tightly closed in a dry, cool and well-ventilated place.
* Copper (II) Nitrate Hydrate recommended storage temperature 2-8°C.
* Hygroscopic, heat and moisture sensitive.
* Keep away from heat and sources of ignition
* Do not store with: oxidising agents, potassium, alkali metals, strong acids, strong oxidizing agents, acid chlorides, halogens, powdered metals, hydroxylamine, magnesium, strong reducing agents.
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| **Spillage and Waste Disposal** | **Spillage*** For a spill of liquid, dilute with excess water and flush to drain. Continue to run water for several minutes to clear waste lines/drain.
* For spill of solid, sweep to pile, transfer to plastic bag or container, label and dispose as hazardous waste. Rinse down surface of LEV with water.
* Do not let the product enter drains.

**Waste:** Dispose of hazardous waste in line with departmental waste management procedures.   |
| **First Aid** | **EYES:** Rinse thoroughly with plenty of water for at least 15 minutes. Seek medical attention. |
| **SKIN:** Wash off with soap and plenty of water. Seek medical attention. |
| **INHALATION:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Seek medical attention. |
| **INGESTION:** Rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention. |