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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). | | | | | | |
| **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 | | | | | | |
| **Hazard Statements**  H272  H302  H315  H318  H317  H319  H335  H400  H410 | Causes serious eye damage  May cause an allergic skin reaction | Harmful if swallowed  Causes skin irritation  May cause respiratory irritation | | Very toxic to aquatic life  Very toxic to aquatic life with long lasting effects | | May intensify a fire: oxidiser | |
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| **Handling Precautions**  P210  P220  P280  P221  P301 + P312 + P330  P305 + P351 + P338 +P310  P370 + 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. | | | | | | |
| **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. | | | | | | |