

EMS CATALOG NO: 20600  
EMS PRODUCT: Ruthenium Red  
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MATERIAL SAFETY DATA SHEET

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.

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FOR PRODUCT AND SALES INFORMATION

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CONTACT ELECTRON MICROSCOPY SCIENCES OFFICE ABOVE.

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PRODUCT IDENTIFICATION

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PRODUCT NAME: Ruthenium Red  
CAS NUMBER: 11103-72-3  
MOLECULAR FORMULA: H42CL6N14O2RU3

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HAZARDS IDENTIFICATION

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LABEL PRECAUTIONARY STATEMENTS:

Caution - Avoid contact and inhalation.

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### FIRST AID MEASURES

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If swallowed, wash out mouth with water provided person is conscious. Call a physician.

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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### FIRE FIGHTING MEASURES

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**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, dry chemical powder, or appropriate foam.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**UNUSUAL FIRE AND EXPLOSIONS HAZARDS:** Emits toxic fumes under fire conditions.

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### ACCIDENTAL RELEASE

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Wear protective equipment. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### EXPOSURE CONTROLS/PERSONAL PROTECTION

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Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required.

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PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE AND ODOR: Red-brown powder

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STABILITY/REACTIVITY DATA

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STABILITY: Stable

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS:

TOXIC FUMES OF: Ammonia, Hydrogen Chloride Gas.

HAZARDOUS POLYMERIZATION: Will not occur.

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TOXICOLOGICAL INFORMATION

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ACUTE EFFECTS: May be harmful by inhalation, ingestion, or skin absorption. May cause irritation.

The toxicological properties have not been thoroughly investigated.

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DISPOSAL CONSIDERATIONS

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Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all Federal, State and local environmental regulations.

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REGULATORY INFORMATION

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EUROPEAN INFORMATION

CAUTION: Substance not yet fully tested.