



## Ruthenium Red for Microscopy MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product form	:	Substance
CAS-No.	:	11103-72-3
Product code	:	33023
Synonyms	:	Ammoniated ruthenium oxychloride

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### 1.2.1. Relevant identified uses

Industrial/professional use spec	:	Industrial
For professional use only	:	
Use of the substance/mixture	:	Laboratory Reagent

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the manufacturer of the safety data sheet

Techno Pharmchem  
Plot No.1022, Modern Industrial Estate,  
Bahadurgarh-124507, India  
info@technopharmchem.com

#### 1.4. Emergency telephone number

Emergency number: +91 11 23646422 (9:30am – 5.30pm)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008[CLP]  
Not classified

Classification according to Directive 67/548/EEC or 1999/45/EC  
Not classified

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

Labeling according to regulation (EC) No. 1272/2008 [CLP]  
No labelling applicable

#### 2.3. Other hazards

No additional information available

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### **3.1. Substances**

Name : RUTHENIUM RED FOR MICROSCOPY  
CAS No : 11103-72-3  
Full text of R- and H- phrases: see section 16

#### **3.2. Mixtures**

Not applicable

Full text of H- and EUH-statements: see section 16

### **SECTION 4: FIRST AID MEASURES**

#### **4.1. Description of first aid measures**

First – aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If you feel unwell, seek medical advice.  
First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

#### **4.2. Most important symptoms and effects, both acute and delayed**

No additional information available

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treat Symptomatically.

### **SECTION 5: FIRE FIGHTING MEASURES**

#### **5.1. Extinguishing media**

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### **5.2. Special hazards arising from the substance or mixture**

No additional information available

#### **5.3. Advice for firefighters**

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

#### **6.1.1. For non-emergency personnel**

Emergency procedures : Evacuate unnecessary personnel.

#### **6.1.2. For emergency responders**

Protective equipment : Use personal protective equipment as required.

Emergency procedures : Stop release.

### **6.2. Environmental precautions**

Avoid release to the environment.

### **6.3. Methods and material for containment and cleaning up**

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### **6.4. Reference to other sections**

No additional information available

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Precautions for safe handling : Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### **7.2. Conditions for safe storage, including any compatibilities**

Storage conditions : Store in original container. Keep container tightly closed.  
Store in a dry place. Protect from moisture.

### **7.3. Specific end use (S)**

No additional information available

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control Parameters**

No additional information available

### **8.2. Exposure controls**

Hand protection : Protective gloves  
Eye protection : Chemical goggles or safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : Wear respiratory protection



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**TECHNO PHARMCHEM**

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Registered Off. : 101-A, Deep Enclave, Pocket "D", Ashok Vihar, Phase-III, Delhi-110 052 (India)  
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Works : Plot No.1022, Modern Industrial Estate, Bahadurgarh-124507, Haryana (India)  
Telephone : 0091 - 11 - 23646422 E-mail : tecpharm@gmail.com  
Website : www.technopharmchem.com

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Colour	:	Brownish red powder
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting Point	:	No data available
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability (Solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	No data available
Log pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosive limits	:	No data available

### 9.2. Other information

No additional information available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical Stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute toxicity	:	Not classified
Skin corrosion/irritation	:	Not classified
Serious eye damage/irritation	:	Not classified
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bio accumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT AND vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Product/package disposal recommendations	:	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
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## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN Number

ADR/RID: - IMDG: - IATA: -

### 14.2. UN proper shipping name

ADR/RID : Not dangerous goods  
IMDG : Not dangerous goods  
IATA : Not dangerous goods

### 14.3. Transport hazard class (es)

ADR/RID: - IMDG: - IATA: -

### 14.4. Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5. Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6. Special precautions for user

No data available

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Ensure all local, regional, national and/or international regulations are observed.

### 15.2 Chemical safety Assessment

For this product a chemical safety assessment was not carried out.

## SECTION 16: OTHER INFORMATION

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. We do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.