

# SAFETY DATA SHEET

## ELECTROFORMING PLATING SOLUTION

### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**PRODUCT NAME** CUMAC SUPREME PLATING SOLUTION  
**PRODUCT NO.** 78714  
**APPLICATION** Copper Plating Solution  
**SUPPLIER** MacDermid NZ Ltd  
 60 The Concourse  
 Henderson  
 Auckland  
 New Zealand  
 09 837 4438  
**EMERGENCY TELEPHONE** POISONS CENTRE: 0800 764 766

### 2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS - No.	Content	Classifications
SULPHURIC ACID 8%	231-639-5	7664-93-9	8%	6.1E, 6.9B, 8.1A, 8.2C, 8.3A, 9.1D, 9.1D

The Full Text for all R-Phrases are Displayed in Section 16

### 3 HAZARDS IDENTIFICATION

Statement of Hazardous Nature: Classified as hazardous according to the criteria in the HS (minimum degrees of hazard) regulations.

Name	HSNO Approval Code	Classifications
SULPHURIC ACID	HSR001573	6.1E, 6.9B, 8.1A, 8.2C, 8.3A, 9.1D, 9.1D

### 4 FIRST-AID MEASURES

#### EYES

Wash affected eyes under slowly running water for 15 minutes. Contact physician immediately.

#### SKIN

If contacted wash the skin with water for 15 minutes. Remove and isolate all contaminated clothes and shoes.

#### INGESTION

If ingested rinse the mouth and throat liberally with water, do not induce vomiting. Contact physician immediately.

#### INHALATION

If unconscious - having trouble breathing - or in convulsions do not induce vomiting or give water.

### 5 FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Dry chemical, carbon dioxide, foam, water. For massive fires use unmanned hose holder or monitor nozzle. NEVER allow run-off to enter sewers or waterways.

#### UNUSUAL FIRE & EXPLOSION HAZARDS

Wear self-contained breathing apparatus/protective clothing. Fight fire from remote locations.

### 6 ACCIDENTAL RELEASE MEASURES

#### PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet. Eye contact MUST be prevented by means of suitable personal protection equipment. Avoid inhalation of vapours and contact with skin and eyes.

#### ENVIRONMENTAL PRECAUTIONS

Collect and dispose of spillage as indicated in section 13. Do not discharge into drains, water courses or onto the ground. Avoid discharge to the aquatic environment.

**SPILL CLEAN UP METHODS**

Soak up into inert absorbent material. DO NOT use sawdust or other organic materials. Collect for disposal in plastic recovery drum. Flush residue with plenty of water to chemical drain.

**7 HANDLING AND STORAGE****USAGE PRECAUTIONS**

Avoid spilling, skin and eye contact. Do not handle broken packages without protective equipment. Use mechanical ventilation in case of handling which causes formation of vapours. Avoid eating, drinking and smoking when using the product. Observe good industrial hygiene practices.

**STORAGE PRECAUTIONS**

Store in tightly closed original container in a cool, dry well-ventilated place. Keep above the chemical's freezing point to avoid rupturing the container. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

**STORAGE CLASS**

Corrosive storage.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Name	STD	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
SULPHURIC ACID ...%	OES		0.3 mg/m3		

**PROTECTIVE EQUIPMENT****ENGINEERING MEASURES**

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

**RESPIRATORY EQUIPMENT**

If ventilation is insufficient, suitable respiratory protection must be provided. Seek advice from supervisor on the companies respiratory protection standards.

**HAND PROTECTION**

Protective gloves must be used if there is a risk of direct contact or splash. Neoprene or PVC gloves are recommended.

**EYE PROTECTION**

Use safety goggles and face shield in case of splash risk.

**OTHER PROTECTION**

Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

**HYGIENE MEASURES**

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove non-impervious clothing that becomes wet. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Eating, smoking and water fountains prohibited in immediate work area.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE</b>	Liquid
<b>COLOUR</b>	Purple, Opaque
<b>ODOUR</b>	Little to no odour
<b>pH</b>	1.0
<b>SPECIFIC GRAVITY</b>	1.02
<b>SOLUBILITY</b>	Soluble in water

---

**10 STABILITY AND REACTIVITY**


---

**STABILITY**

Stable under normal temperature conditions and recommended use.

**MATERIALS TO AVOID**

Alkaline materials

**HAZARD DECOMPOSITION PRODUCTS**

Oxides of sulfur

---

**11 TOXICOLOGICAL INFORMATION**


---

**EYES**

Brief exposure may cause burning, tearing redness, swelling. Intense watering of eyes will occur. Prolonged contact may cause permanent eye injury (blindness).

**SKIN**

Itching and tingling sensation may be produced. May cause irritation and damage to skin. Profound damage to tissues may occur with prolonged exposure.

**INGESTION**

May burn mouth/throat and stomach. Damage to digestive tract including corrosive effects. Stomach or abdominal pain may develop.

**INHALATION**

Irritation of mucous membrane of nose/mouth/throat may occur. May cause burns to entire respiratory system. Acute pulmonary edema may develop.

---

**12 ECOLOGICAL INFORMATION**


---

**ECOTOXICITY**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

**WATER HAZARD CLASSIFICATION**

WGK 1

---

**13 DISPOSAL CONSIDERATIONS**


---

**GENERAL INFORMATION**

Waste is classified as special waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

**DISPOSAL METHODS**

Dilute with large amounts of water and neutralize with dilute base. Discard to chemical waste treatment system.

---

**14 TRANSPORT INFORMATION**


---



<b>UK ROAD CLASS</b>	8		
<b>PROPER SHIPPING NAME</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC,N.O.S.(DILUTE SULPHURIC ACID)		
<b>UN NO. ROAD</b>	UN3264	<b>UK ROAD PACK GR.</b>	III
<b>ADR CLASS NO.</b>	8		
<b>ADR CLASS</b>	Class 8: Corrosive substances.		
<b>ADR PACK GROUP</b>	III		
<b>HAZARD NO. (ADR)</b>	80 Corrosive or slightly corrosive substance.		
<b>UN NO. SEA</b>	UN3264	<b>IMDG CLASS</b>	8

<b>IMDG PACK GR.</b>	III	<b>MARINE POLLUTANT</b>	No.
<b>UN NO. AIR</b>	UN3264	<b>ICAO CLASS</b>	8
<b>AIR PACK GR.</b>	III		

---

**15 REGULATORY INFORMATION**

---

**LABELLING**

Corrosive

**CONTAINS** SULPHURIC ACID 8%**RISK PHRASES**

R35 Causes severe burns.

**SAFETY PHRASES**

S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).  
S60 This material and its container must be disposed of as hazardous waste.  
P14 Contains BIS-(3-SULFOPROPYL)-DISULPHIDE, DISODIUM SALT. May produce an allergic reaction.

**EU DIRECTIVES**

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EEC. System of specific information relating to Dangerous Preparations. 2001/58/EEC.

**APPROVED CODE OF PRACTICE**

Safety Data Sheets for Substances and Preparations. Classification and Labeling of Substances and Preparations Dangerous for Supply.

**GUIDANCE NOTES**

Occupational Exposure Limits EH40.

**NATIONAL REGULATIONS**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689. Health and Safety at Work Act (As Amended) 1974 Control of Substances Hazardous to Health Regulations 1999 Carriage of Dangerous Goods by Road Regulations 1996

---

**16 OTHER INFORMATION**

---

**DATE** 29/09/2009  
**SIGNATURE** KS

**DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.