



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Copper Sulfate Solution (for Women)	<b>Product Code</b>	2411A
<b>Manufacturer</b>	EMD Chemicals Inc. P.O. Box 70 480 Democrat Road Gibbstown, NJ 08027 Prior to January 1, 2003 EMD Chemicals Inc. was EM Industries, Inc. or EM Science, Division of EM Industries, Inc.	<b>Effective Date</b>	2/18/2005
		<b>Print Date</b>	3/8/2005

### For More Information Call

856-423-6300 Technical Service  
Monday-Friday: 8:00 AM - 5:00 PM

### In Case of Emergency Call

800-424-9300 CHEMTREC (USA)  
613-996-6666 CANUTEC (Canada)  
24 Hours/Day: 7 Days/Week

**Synonym** None.

**Material Uses** Laboratory Reagent

**Chemical Family** Inorganic salt solution.

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Copper (II) Sulfate	7758-98-7	<8.5
Methyl-4-hydroxybenzoate	99-76-3	<0.2
Water	7732-18-5	>92

## Section 3. Hazards Identification

**Physical State and Appearance** Liquid.

**Emergency Overview** DANGER !  
HARMFUL IF SWALLOWED.  
CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
TOXIC TO AQUATIC ORGANISMS.  
MAY BE HARMFUL TO ENVIRONMENT IF RELEASED IN LARGE AMOUNTS.

**Routes of Entry** Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential Acute Health Effects

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Skin** Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

**Inhalation** Hazardous in case of inhalation (lung irritant).

**Ingestion** Hazardous in case of ingestion. Do not ingest.

### Potential Chronic Health Effects

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

Additional information See Toxicological Information (section 11)

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<b>Medical Conditions Aggravated by Overexposure:</b>	Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.
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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
<b>Ingestion</b>	If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not applicable.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	<b>Risks of explosion of the product in presence of static discharge:</b> No. <b>Risks of explosion of the product in presence of mechanical impact:</b> No.
<b>Fire Fighting Media and Instructions</b>	Use DRY chemicals, CO <sub>2</sub> , alcohol foam or water spray.
<b>Protective Clothing (Fire)</b>	Wear MSHA/NIOSH approved self-contained breathing apparatus or equivalent and full protective gear.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Thermal decomposition may release toxic and/or hazardous gases.

**Section 6. Accidental Release Measures**

<b>Small Spill and Leak</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill and Leak</b>	Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
<b>Spill Kit Information</b>	No specific spill kit required for this product.

**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Do not ingest. Avoid breathing vapors or spray mists. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 15 to 30°C (59 to 86°F).

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
<b>Personal Protection</b>	
<b>Eyes</b>	Splash goggles.
<b>Body</b>	Lab coat.
<b>Respiratory</b>	Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	Gloves.
<b>Feet</b>	Not applicable.

**Protective Clothing (Pictograms)****Personal Protection in Case of a Large Spill**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Product Name**

Copper (II) Sulfate

**Exposure Limits****BAUA (Germany, 1997).**Spitzenbegrenzung: 4 mg/m<sup>3</sup>TWA: 1 mg/m<sup>3</sup> 8 hour(s).**Tyterveyslaitos (Finland, 1998).**TWA: 1 mg/m<sup>3</sup> 8 hour(s).**AFS (Sweden, 1996).**NGV: 1 mg/m<sup>3</sup> 8 hour(s).

Methyl-4-hydroxybenzoate

Not available.

Water

Not available.

**Section 9. Physical and Chemical Properties**

<b>Odor</b>	Odorless.
<b>Color</b>	Clear. Blue.
<b>Physical State and Appearance</b>	Liquid.
<b>Molecular Weight</b>	Not applicable.
<b>Molecular Formula</b>	Not applicable.
<b>pH</b>	Not available.
<b>Boiling/Condensation Point</b>	The lowest known value is 99.9°C (211.8°F) (Water).
<b>Melting/Freezing Point</b>	May start to solidify at -0.1°C (31.8°F) based on data for: Water.

<b>Specific Gravity</b>	1.053 (Water = 1)
<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Odor Threshold</b>	Not available.
<b>Evaporation Rate</b>	0.36 (Water) compared to(n-Butyl Acetate =1)
<b>LogK<sub>ow</sub></b>	Not available.
<b>Solubility</b>	Soluble in water.

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Conditions of Instability</b>	Avoid exposure to heat.
<b>Incompatibility with Various Substances</b>	Not available.
<b>Rem/Incompatibility</b>	Avoid excessive heat.
<b>Hazardous Decomposition Products</b>	SO <sub>x</sub> , CuO
<b>Hazardous Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>RTECS Number:</b>	Cupric Sulfate	GL8800000
	Methylparaben	DH2450000
	Water	ZC0110000

**Toxicity** Not available.

**Chronic Effects on Humans** Not available.

**Acute Effects on Humans** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant). Hazardous in case of ingestion.

**Special Remarks on Other Toxic Effects on Humans** MAY BE IRRITATING ON CONTACT WITH MUCOUS MEMBRANES.

**Synergetic Products (Toxicologically)** Not available.

**Irritancy** Draize Test: Not available.

**Sensitization** Not available.

**Carcinogenic Effects** This material is not known to cause cancer in animals or humans.

**Toxicity to Reproductive System** Not available.

**Teratogenic Effects** Not available.

**Mutagenic Effects** Not available.

**Section 12. Ecological Information**

**Ecotoxicity** Not available.

**BOD5 and COD** Not available.

**Toxicity of the Products of Biodegradation** The products of degradation are less toxic than the product itself.

**+ Section 13. Disposal Considerations**

**EPA Waste Number** Not available.

**Treatment** Material does not have an EPA Waste number and is not a listed waste, however consultation with a permitted waste disposal site (TSD) should be accomplished.

**Section 14. Transport Information**

**DOT Classification** Not available.

**TDG Classification** Not available.

**IMO/IMDG Classification** Not available.

**ICAO/IATA Classification** Not available.

**Section 15. Regulatory Information**

**U.S. Federal Regulations** TSCA 8(b) inventory: Cupric Sulfate ; Methylparaben; Water  
 SARA 302/304/311/312 extremely hazardous substances: No products were found.  
 SARA 302/304 emergency planning and notification: No products were found.  
 SARA 302/304/311/312 hazardous chemicals: Cupric Sulfate  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Cupric Sulfate :  
 Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard  
 SARA 313 toxic chemical notification and release reporting: Cupric Sulfate 8.415%  
 Clean Water Act (CWA) 307: Cupric Sulfate  
 Clean Water Act (CWA) 311: Cupric Sulfate  
 Clean air act (CAA) 112 accidental release prevention: No products were found.  
 Clean air act (CAA) 112 regulated flammable substances: No products were found.  
 Clean air act (CAA) 112 regulated toxic substances: No products were found.

**WHMIS (Canada)** Class D-2A: Material causing other toxic effects (VERY TOXIC).

CEPA DSL: Cupric Sulfate ; Methylparaben; Water

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

**International Regulations**

<b>EINECS</b>	Cupric Sulfate	231-847-6
	Methylparaben	202-785-7
	Water	231-791-2

**DSCL (EEC)** R36- Irritating to eyes.

**International Lists** Australia (NICNAS): Cupric Sulfate ; Methylparaben; Water

China: Methylparaben

Germany water class: Methylparaben

Japan (MITI): Cupric Sulfate ; Methylparaben; Water

Korea (TCCL): Cupric Sulfate ; Methylparaben; Water

Philippines (RA6969): Cupric Sulfate ; Methylparaben; Water

China: Methyl-4-hydroxybenzoate

#### State Regulations

Pennsylvania RTK: Cupric Sulfate : (environmental hazard, generic environmental hazard)

Massachusetts RTK: Cupric Sulfate New Jersey: Copper Sulfate Solution (for Women)

New Jersey spill list: Methylparaben

California prop. 65: No products were found.

### Section 16. Other Information

**National Fire  
Protection  
Association  
(U.S.A.)**



**Changed Since Last  
Revision**



#### Notice to Reader

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