



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Gentian Violet 1% Aqueous Solution	<b>Product Code</b>	614
<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>	3/15/2005
		<b>Print Date</b>	3/15/2005

### 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** Organic Dye Solution

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Zinc	7440-66-6	0.01-0.06
Michler's Ketone	90-94-8	0.004
Crystal Violet	548-62-9	0.9
Paraffin Oil, White	8042-47-5	0.03
Water	7732-18-5	99

## Section 3. Hazards Identification

**Physical State and Appearance** Liquid.

**Emergency Overview** CAUTION !  
CAUSES EYE IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.  
MAY CAUSE RESPIRATORY TRACT AND SKIN IRRITATION.

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

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

**Inhalation** May be hazardous in case of inhalation (lung irritant).

**Ingestion** May be hazardous in case of ingestion. Do not take internally.

### Potential Chronic Health Effects

Continued on Next Page

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

Additional information See Toxicological Information (section 11)

**Medical Conditions  
Aggravated by  
Overexposure:**

Repeated or prolonged exposure is not known to aggravate medical condition.

### **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. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

### **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>	Not applicable.
<b>Protective Clothing (Fire)</b>	Wear suitable protective clothing.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

### **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>	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
<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. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	Keep container tightly closed.

**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.
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**Personal Protection**

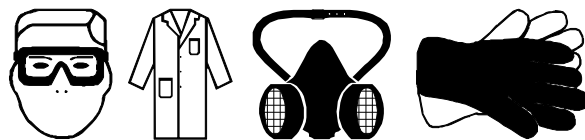
**Eyes** Splash goggles.

**Body** Lab coat.

**Respiratory** Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

**Hands** Gloves.

**Feet** 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**

Zinc

Michler's Ketone  
Crystal Violet  
Paraffin Oil, White  
Water

**Exposure Limits**

**SUVA (Switzerland, 1997). Skin**  
Kurzezeitgrenzwerte: 0.2 mg/m<sup>3</sup> 15 minute(s).  
MAK: 0.1 mg/m<sup>3</sup> 8 hour(s).  
Not available.  
Not available.  
Not available.  
Not available.

**Section 9. Physical and Chemical Properties**

<b>Odor</b>	Odorless.
<b>Color</b>	Purple.
<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>	Not available.
<b>Vapor Pressure</b>	Not available.

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

### Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Not available.
Rem/Incompatibility	Not available.
Hazardous Decomposition Products	CO <sub>x</sub> , NO <sub>x</sub> , HCl
Hazardous Polymerization	Will not occur.

### Section 11. Toxicological Information

RTECS Number:	Zinc	ZG8600000
	Michler's Ketone	DJ0250000
	Crystal Violet	BO9000000
	Mineral Oil Light	Not available.
	Water	ZC0110000
Toxicity	LD <sub>50</sub> : Not available. LC <sub>50</sub> : 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. May be hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. May be hazardous in case of inhalation (lung irritant). May be hazardous in case of ingestion.	
Special Remarks on Other Toxic Effects on Humans	Material is irritating to mucous membranes and upper respiratory tract.	
Synergetic Products (Toxicologically)	Not available.	
Irritancy	<u>Draize Test</u> : 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 as toxic as 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: Zinc; Michler's Ketone; Crystal Violet; Paraffin Oil, White; 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: Zinc; Michler's Ketone; Crystal Violet  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Zinc: Fire Hazard, Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard; Michler's Ketone: Delayed (Chronic) Health Hazard; Crystal Violet: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard  
SARA 313 toxic chemical notification and release reporting: No products were found.  
Clean Water Act (CWA) 307: Zinc  
Clean Water Act (CWA) 311: No products were found.  
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-2B: Material causing other toxic effects (TOXIC).

CEPA DSL: Zinc; Michler's Ketone; Crystal Violet; Paraffin Oil, White; 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**

**EINECS**

Zinc	231-175-3
Michler's Ketone	202-027-5
Crystal Violet	208-953-6
Paraffin Oil, White	232-455-8
Water	231-791-2

**DSCL (EEC)** This product is not classified according to the EU regulations.

**International Lists** Australia (NICNAS): Zinc; Michler's Ketone; Crystal Violet; Paraffin Oil, White; Water

China: Michler's Ketone; Crystal Violet

Japan (MITI): Michler's Ketone; Crystal Violet; Water

Korea (TCCL): Zinc; Michler's Ketone; Crystal Violet; Paraffin Oil, White; Water

Philippines (RA6969): Zinc; Michler's Ketone; Crystal Violet; Paraffin Oil, White; Water

China: Michler's Ketone; Crystal Violet

**State Regulations**

Pennsylvania RTK: Zinc: (environmental hazard, generic environmental hazard); Michler's Ketone: (special hazard, environmental hazard, generic environmental hazard)

Massachusetts RTK: Zinc; Michler's Ketone

New Jersey: Gentian Violet 1% Aqueous Solution

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Michler's Ketone

California prop. 65 (no significant risk level): Michler's Ketone

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Michler's Ketone

**Section 16. Other Information**

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



**Changed Since Last  
Revision**

**+**

**Notice to Reader**

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