



# Material Safety Data Sheet

## Section 1. Product and Company Identification

<b>Product Name</b>	Giemsa Stain	<b>Product Code</b>	228
<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>	2/4/2005
		<b>Print Date</b>	2/4/2005

### 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

<b>Synonym</b>	None.
<b>Material Uses</b>	Laboratory Reagent
<b>Chemical Family</b>	Organic Dye Mixture

## Section 2. Composition and Information on Ingredients

Component	CAS #	% by Weight
Azure A	531-53-3	<50
Eosin Y	17372-87-1	<50
Methylene Blue	61-73-4	<0.1

## Section 3. Hazards Identification

<b>Physical State and Appearance</b>	Solid. (Crystals)
<b>Emergency Overview</b>	CAUTION ! CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
<b>Routes of Entry</b>	Dermal contact. Eye contact. Inhalation. Ingestion.
<b>Potential Acute Health Effects</b>	<p><b>Eyes</b> Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.</p> <p><b>Skin</b> Hazardous in case of skin contact (irritant). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.</p> <p><b>Inhalation</b> Hazardous in case of inhalation (lung irritant).</p> <p><b>Ingestion</b> No known acute effects of this product resulting from ingestion.</p>
<b>Potential Chronic Health Effects</b>	<p><b>Carcinogenic Effects</b> This material is not known to cause cancer in animals or humans.</p> <p>Additional information See Toxicological Information (section 11)</p>

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**Medical Conditions** Repeated or prolonged exposure is not known to aggravate medical condition.  
**Aggravated by**  
**Overexposure:**

#### Section 4. First Aid Measures

**Eye Contact** 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.

**Skin Contact** 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.

**Inhalation** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Ingestion** 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 if symptoms appear.

#### Section 5. Fire Fighting Measures

**Flammability of the Product** Non-flammable.

**Auto-ignition Temperature** Not applicable.

**Flash Points** Not applicable.

**Flammable Limits** Not applicable.

**Products of Combustion** Not applicable.

**Fire Hazards in Presence of Various Substances** Not applicable.

**Explosion Hazards in Presence of Various Substances** Risks of explosion of the product in presence of static discharge: No.  
Risks of explosion of the product in presence of mechanical impact: No.

**Fire Fighting Media and Instructions** Not applicable.

**Protective Clothing (Fire)** Not applicable.

**Special Remarks on Fire Hazards** Not available.

**Special Remarks on Explosion Hazards** Development of hazardous combustion gases or vapors possible in the event of fire.

#### Section 6. Accidental Release Measures

**Small Spill and Leak** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill and Leak** Use a shovel to put the material into a convenient waste disposal container.

**Spill Kit Information** No specific spill kit required for this product.

## Section 7. Handling and Storage

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Avoid breathing dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
<b>Storage</b>	Keep in a well-ventilated place.

## Section 8. Exposure Controls/Personal Protection

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	
<b>Eyes</b>	Splash goggles.
<b>Body</b>	Lab coat.
<b>Respiratory</b>	Dust 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. Dust 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

Azure A  
Eosin Y  
Methylene Blue

### Exposure Limits

Not available.  
Not available.  
Not available.

## Section 9. Physical and Chemical Properties

<b>Odor</b>	Not available.
<b>Color</b>	Purple-Black
<b>Physical State and Appearance</b>	Solid. (Crystals)
<b>Molecular Weight</b>	Not applicable.
<b>Molecular Formula</b>	Not applicable.
<b>pH</b>	Not available.
<b>Boiling/Condensation Point</b>	Not available.
<b>Melting/Freezing Point</b>	Not available.
<b>Specific Gravity</b>	Not available.
<b>Vapor Pressure</b>	Not available.
<b>Vapor Density</b>	Not available.
<b>Odor Threshold</b>	Not available.

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**Evaporation Rate** Not available.

**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** Reactive with oxidizing agents, reducing agents.

**Rem/Incompatibility** Not available.

**Hazardous Decomposition Products** These products are halogenated compounds, hydrogen chloride.

**Hazardous Polymerization** Will not occur.

### Section 11. Toxicological Information

**RTECS Number:**

Azure A	SP5660000
Eosin Y (Yellowish)	LM5850000
Methylene Blue	SO5600000

**Toxicity** Acute oral toxicity (LD<sub>50</sub>): 2344 mg/kg [Mouse]. (Eosin Y).

**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). Non-hazardous in the case of ingestion.

**Special Remarks on Other Toxic Effects on Humans** Irritating to 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 more toxic than the product itself.

**Section 13. Disposal Considerations**

<b>EPA Waste Number</b>	Not available.
<b>Treatment</b>	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. ALWAYS CONTACT A PERMITTED WASTE DISPOSER (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE AND FEDERAL REGULATIONS.

**Section 14. Transport Information**

<b>DOT Classification</b>	Not available.
<b>TDG Classification</b>	Not available.
<b>IMO/IMDG Classification</b>	Not available.
<b>ICAO/IATA Classification</b>	Not available.

**Section 15. Regulatory Information**

<b>U.S. Federal Regulations</b>	TSCA 8(b) inventory: Azure A; Eosin Y; Methylene Blue 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: Methylene Blue SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Methylene Blue: Delayed (Chronic) Health Hazard SARA 313 toxic chemical notification and release reporting: No products were found. Clean Water Act (CWA) 307: No products were found. 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.
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<b>WHMIS (Canada)</b>	Class D-2A: Material causing other toxic effects (VERY TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).
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CEPA DSL: Azure A; Eosin Y; Methylene Blue

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>	Azure A	208-510-7
	Eosin Y	241-409-6
	Methylene Blue	200-515-2

<b>DSCL (EEC)</b>	R37/38- Irritating to respiratory system and skin. R41- Risk of serious damage to eyes.
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**International Lists** Australia (NICNAS): Azure A; Eosin Y; Methylene Blue

Japan (MITI): Eosin Y; Methylene Blue

Korea (TCCL): Eosin Y; Methylene Blue

Philippines (RA6969): Eosin Y; Methylene Blue  
China: No products were found.

<b>State Regulations</b>	New Jersey: Giemsa Stain California prop. 65: No products were found.
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**Section 16. Other Information**

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



**Changed Since Last  
Revision**

**Notice to Reader**

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