

# Material Safety Data Sheet

## (10840)

### Section 1: Chemical Product and Company Identification

**Product Name:** Aniline Blue, Certified

**Catalog Number:** 10840

**CAS#:** 28631-66-5

**Contact Information:**

**Electron Microscopy Sciences**

1560 Industry Road

Hatfield, PA 19440

1-215-412-8400 (phone)

1-800-523-5874 (toll-free)

1-215-412-8450 (fax)

**Order Online:** [emsdiasum.com](http://emsdiasum.com)

**CHEMTREC (24-Hour Emergency Telephone), call:** 1-800-424-9300

### Section 2: Composition and Information on Ingredients

CAS #	Chemical Name	Percent	Hazardous
28631-66-5	Aniline Blue	100	No

### Section 3: Hazards Identification

#### Emergency Overview

**Appearance:** Dark-Red-Brown powder

**Caution!** May cause eyes and skin irritation. May cause respiratory and digestive tract irritation. May cause methemoglobinemia.

**Target Organs:** Blood

**Potential Health Effects:**

**Eye:** May cause eye irritation. The toxicological properties of this material have not been fully investigated.

**Skin:** May cause skin irritation.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Chronic:** May cause Methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient).

### Section 4: First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** For Methemoglobinemia, administer oxygen alone or with Methylene Blue depending on the methemoglobin concentration in the blood.

**Antidote:** Methylene blue, alone or in combination with oxygen is indicated as a treatment in nitrite induced.

### Section 5: Fire and Explosion Data

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material. Use agent most appropriate to extinguish fire.

**Flash Point:** Not available.

**Auto ignition Temperature:** Not available.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health 1; Flammability: 0; Instability: 0

### Section 6: Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

### Section 7 : Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

### Section 8: Exposure Controls/Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits:**

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Aniline Blue	None listed	None listed	None listed

**OSHA Vacated PELs:** C.I. Acid Blue 22: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective clothing to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA’s 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator’s use.

**Section 9: Physical and Chemical Properties**

**Physical State:** powder  
**Appearance:** Dark Red-Brown  
**Odor:** odorless  
**pH:** N/A  
**Vapor Pressure:** negligible  
**Vapor Density:** Not available  
**Evaporation Rate:** Not available  
**Viscosity:** Not available  
**Freezing/Melting Point:** N/A  
**Decomposition Temperature:** Not available  
**Solubility:** Soluble in water  
**Specific Gravity/Density:** Not available  
**Molecular Formula:** C32H25N3Na2O9S3  
**Molecular Weight:** 737.73

**Section 10: Stability and Reactivity Data**

**Chemical Stability:** Stable under normal temperature and pressures.  
**Conditions to Avoid:** Incompatible materials, dust generation, excess heat  
**Incompatibles with Other Materials:** Oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide and nitrogen oxides.  
**Hazardous Polymerization:** Will not occur.

**Section 11: Toxicological Information**

**RYECS#:**  
**CAS#** 28631-5: DB4958000  
**LD50/LC50:** Oral, mouse: LD50=5 mg/kg  
 Not available  
**Carcinogenicity:**  
 Not listed by ACGIH, IARC, NTP, or CA Prop. 65  
  
**Epidemiology:** No information available.  
**Teratogenicity:** No information available.  
**Reproductive Effects:** No information available.  
**Neurotoxicity:** No information available.

Mutagenicity: No information available.  
Other Studies: No information available.

### Section 12: Ecological Information

No information available.

### Section 13: Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 VCFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed  
RCRA U-Series: None listed

### Section 14: Transport Information

	US DOT	Canada TDG
<b>Shipping Name</b>	Not regulated as a hazardous material	Not listed on Canada's DSL list
<b>Hazard Class</b>		
<b>UN Number</b>		
<b>Packing Group</b>		

### Section 15: Other Regulatory Information

#### US Federal

#### TSCA

Not listed on a TSCA Inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule

#### Section 12b

None of the chemicals are listed under TSCA Section 12b

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### Section 313: No chemicals are reportable under Section 313

#### Clean Air Act:

This material does not contain any hazardous air pollutants

This material does not contain Class 1 Ozone depleters

This material does not contain any Class 2 Ozone depleters

#### Clean Water Act

None of the chemicals in this product are listed as Hazardous Substances under CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA

None of the chemicals in this product are considered highly hazardous by OSHA.

#### State

CAS # 28631-66-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ

**California Prop. 65**

**California No Significant Risk Level:** None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:** XC

**Risk Phases:** R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phases:** Avoid contact with skin and eyes.

S36/37 Wear suitable protective clothing and gloves

S45 In case of accident or if you feel unwell, seek medical advice

S28A After contact with skin, wash immediately with plenty of water.

**WGK (Water Danger/Protection)**

CAS# 28631-66-5: No information available

**Canada – DSL/NDSL**

CAS# 28631-66-5 is listed on Canada's DSL list

**Canada – WHMIS**

No information available

**Canadian Ingredient Disclosure List**

CAS# 28631-66-5 is listed on the Canadian Ingredient Disclosure List

**Section 16: Other Information:**

**MSDS Creation Date: 1/15/2010**

**Last Updated: 10/13/11**

**Date Verified and Printed: 10/13/11**

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