
MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: ALCIAN BLUE, CERTIFIED

Catalog number: 862, 864

General use: To prepare stain for acid polysaccharides.

Product description: Blue powder.

Manufacturer

Anatech Ltd.
1020 Harts Lake Road
Battle Creek, MI 49037
USA

Emergency contact information

Health:	Anatech Ltd.	800-262-8324	8 am - 5 pm ET, M-F
Transportation:	CHEMTREC	800-424-9300	24 hours

2. COMPOSITION AND INFORMATION ON INGREDIENTS

Component

Alcian blue dye (C.I. 74240)

CAS #

75881-23-1

Exposure limits

Not established.
TLV = 10 mg/m³ as nuisance particulates

3. HAZARDS IDENTIFICATION

Emergency overview

Blue powder.

Not likely to pose a health risk except as a nuisance dust under normal conditions of use.

Potential health effects

(Human health effects only.)

Primary route(s) of exposure: Eyes, skin and inhalation.

Inhalation: Inhalation of particles may irritate respiratory system.

Eye: Contact of powder with eyes may cause irritation.

Skin: No effects have been reported.

Ingestion: No effects have been reported.

Chronic effects: Alcian blue is a copper compound. Target organ effects due to chronic copper poisoning have been reported in the liver, brain, kidney, eyes, blood and blood vessels.

Signs and symptoms: Affected skin will be stained blue, eyes may water and coughing may occur.

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air if coughing or difficulty in breathing is experienced. Consult a physician if symptoms persist or worsen. Administer oxygen or artificial respiration as needed.

Eye: Flush eyes for at least 15 minutes in an eyewash station. If symptoms persist after washing, consult a physician.

Skin: Remove contaminated clothing, including footwear; wash before reuse or discard. For minor exposure, wash affected area with water and mild soap, rinsing thoroughly; apply a good quality skin lotion. In cases of prolonged, repeated or extensive exposure, rinse affected area or entire body for at least 15 minutes. For severe conditions, consult a physician.

Ingestion: Call a poison control center immediately. If victim is conscious, have him/her drink several glasses of water to dilute the solution. Induce vomiting only upon the advice of a physician or poison control authority.

5. FIRE FIGHTING MEASURES

Flammable properties

Flash point: Not applicable.

Flammable limit: Not applicable.

Autoignition temperature: Not applicable.

Flammability classification: Not applicable.

Flame propagation: None.

Hazardous products of combustion: Large volume of dye powder may emit carbon oxides, nitrogen oxide, sulfur oxide and hydrogen chloride gas.

Extinguishing media: ABC rated portable fire extinguishers should be used. Professional fire fighters may use water spray, dry chemical or carbon dioxide.

Fire fighting instructions: No special instructions required for small volumes sold. Large volumes of dye powder may emit toxic fumes under fire conditions. Sealed chemical suits and self contained breathing apparatus are necessary for fighting fires involving substantial volumes of this product.

6. ACCIDENTAL RELEASE MEASURES

Small spills (25 gram bottle): Wear protective gloves. Remove dry powder. Wash affected area with water.

Large spills (bulk purchases): Sweep up and collect for waste disposal. Ventilate and wash spill site. Or evacuate the area and have an emergency response team perform the cleanup.

7. HANDLING AND STORAGE

Handling: Wear protective gloves when handling the powder. An impermeable apron is also recommended as a prudent measure of protection when preparing solutions using this dye. Avoid contact with skin and eyes.

Storage: Store at room temperature.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls: Good general room ventilation is essential.

Personal protective equipment

Respiratory protection: Generally not needed, but a NIOSH-approved particle mask may be used if desired.

Skin protection: Use protective gloves when handling this powder. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

Eye protection: Use splash-proof goggles. Do not use safety glasses. An eyewash station and safety shower must be nearby, preferably in the same room, no more than 10 seconds away.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue.

Odor: None.

Physical state: Powder.

pH: Not applicable.

Vapor pressure: Not applicable.

Vapor density: Not applicable.

Boiling point: Not applicable.

Freezing point: Not applicable.

Solubility in water: Less than 10%.

Specific gravity: Not applicable.

10. STABILITY AND REACTIVITY

Chemical stability: Stable.

Conditions to avoid: None.

Incompatibility with other materials: Strong oxidants.

Hazardous decomposition products: None.

Hazardous polymerization: None.

11. TOXICOLOGICAL INFORMATION

Acute effects: None known.

Chronic effects/carcinogenicity: Alcian blue is a copper compound. Target organ effects due to chronic copper poisoning have been reported in the liver, brain, kidney, eyes, blood and blood vessels. There is no evidence of carcinogenicity.

12. ECOLOGICAL INFORMATION

No environmental information is known.

13. DISPOSAL CONSIDERATIONS

Bury or incinerate according to federal, state (provincial) and local regulations. Proper waste disposal is the generator's responsibility.

Canadian disposal regulations generally parallel those in the United States.

14. TRANSPORTATION INFORMATION

DOT (ground and air) and IATA: Not regulated.

15. REGULATORY INFORMATION

OSHA (USA): Alcian blue is not a hazardous material.

FDA (USA): Alcian blue is for in vitro diagnostic use as a biological dye in histology.

EPA (USA): Alcian blue is a copper compound. It is a reportable substance under SARA Title III.

16. OTHER INFORMATION

Label warnings: Irritant. Avoid contact with eyes, skin and respiratory system.

This Material Safety Data Sheet has been prepared in accordance with the requirements of the OSHA Hazard Communication Standard. It conforms to the provisions of the American National Standards Institute (ANSI) Standard Z400.1 (Standard for the Preparation of Material Safety Data Sheets). Information contained herein was obtained from sources which Anatech Ltd. believes are reliable. It is the user's responsibility to determine suitability of the product for his/her own use, and to assure proper use and disposal of it to protect the safety and health of employees and the protection of the environment.