



COLUMBUS CHEMICAL INDUSTRIES INC.

P.O. BOX 8
 COLUMBUS, WISCONSIN 53925-0008
 (920) 623-2140
 FAX (920) 623-2577

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Methylene Blue, Milk Smear Stain

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code

Columbus Chemical Industries, Inc.

N4335 Temkin Road

Columbus, Wisconsin 53925

Emergency Telephone Number

CHEMTREC 1 (800) 424-9300

Telephone Number for Information

1 (920) 623-2140

Date Prepared

08-22-2006

Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
1,1,2,2-Tetrachloroethane*	79-34-5	5 ppm skin	1 ppm skin	1 ppm skin	60%
Ethyl Alcohol	64-17-5	1000 ppm TWA	1000 ppm TWA	Not available	31%
Acetic Acid*	64-19-7	10 ppm TWA	10 ppm TWA	15 ppm	3.5%
Isopropyl Alcohol	67-63-0	400 ppm	200 ppm TWA	500 ppm STEL	2%
Methyl Alcohol*	67-56-1	200 ppm	200 ppm TWA	250 ppm STEL	2%
Methylene Blue Chloride	61-73-4	Not Available	Not Available	Not Available	<1%

*Subject to the reporting requirements of SARA Title III Section 313.

Section III - Physical/Chemical Characteristics

Boiling Point	Not available	Specific Gravity (H ₂ O = 1)	1.215
Vapor Pressure (mm Hg)	Not available	Melting Point	Not available
Vapor Density (AIR = 1)	Not available	Evaporation Rate (Butyl Acetate = 1)	Not available

Solubility in Water

Partially soluble in water.

Appearance and Odor

Opaque, blue liquid with solvent odor.

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Not available	%V/V	Not available	Not available

Extinguishing Media

Use CO₂, "Alcohol Type" foam, or dry chemical extinguishing media. Use fog nozzles if water is used.

Special Fire Fighting Procedures

In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions. Vapors from this product may migrate along currents to an ignition source and flash back. Container explosion may occur under fire conditions.

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Strong oxidizers,
	Stable	X		Avoid heat, sparks, open flames.

Incompatibility Materials to Avoid

Oxidizers, nitric acid, sulfuric acid, aldehydes, halogen compounds, peroxides, acid anhydrides, ammonia, alkali metals.

Hazardous Decomposition or Byproducts

Carbon dioxide, carbon monoxide, chlorinate compounds, sulfur and nitrogen oxides

Hazardous Polymerization**Conditions to Avoid**

	May Occur		Not available.
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
Multiple	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

May be fatal if swallowed; harmful if inhaled or absorbed through skin. Irritating to skin, eye, mucous membranes and upper respiratory tract. Can cause central nervous system depression, anemia, convulsions. Chronic exposure can cause liver, heart, and kidney damage and blindness. Toxic to lungs, nervous system, liver and mucous membranes.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not Listed	Group3-not classifiable(Tetrachloroethane)	Not Listed

Signs and Symptoms of Exposure.

Headache, nausea, vomiting, dizziness, drowsiness, unconsciousness, delirium, weakness, hallucinations, blood pressure

decrease, lung irritation, chest pains, gastrointestinal disturbances, difficulty breathing, eye irritation and watering, skin irritation.

Medical Conditions Generally Aggravated by Exposure

Pre-existing skin, eye, and respiratory conditions.

Emergency and First Aid Procedures **EYES:** In case of contact, immediately flush with large amounts of water for at least 15

INGESTION: Get medical attention immediately. **DO NOT INDUCE VOMITING.** Keep victim warm and calm. **SKIN:**

Wash with soap and water. **INHALATION:** If inhaled, remove to fresh air. If not breathing, give artificial respiration.

If breathing give oxygen. Call a physician.

Section VII Precautions for Safe Handling and Use**Steps to be Taken in Case Material is Released or Spilled**

Evacuate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant goggles, rubber boots, apron and heavy rubber gloves. Contain spill with dikes, sand or noncombustible absorbent material. Sweep up and place in a bag and hold for waste disposal. Ventilate area after material pickup is complete.

Waste Disposal Method Dispose in accordance with all Federal, state, and local regulations. Prevent release of product to the environment.

Precautions to be Taken in Handling and Storing Keep in tightly closed plainly-labelled containers, stored in a cool, dry, ventilated area. Protect against physical damage. Combustible. Keep away from heat, sparks and flame. Maintain adequate ventilation.

Other Precautions Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

Section VII Control Measures

Respiratory Protection (Specify Type) NIOSH/MSHA-approved respirator with organic vapor cartridge.

Ventilation	Local Exhaust	Recommended.	Special	Safety shower nearby.
	Mechanical (General)	Recommended.	Other	Eyewash facilities nearby.

Protective Gloves Appropriate, chemical-resistant gloves. **Eye Protection** Chemical Safety Goggles

Other Protective Clothing or Equipment Saranax suit, rubber boots, faceshield.

Work /Hygienic Practices Contact lenses should not be worn when working with this material. Avoid eye and skin contact.

Avoid breathing vapors. Follow safe handling and laboratory practices. Wash hands prior to eating or smoking.

Avoid prolonged or repeated exposure.

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