
MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: TANGO STAIN

Catalog number: 852

General use: Nuclear stain.

Product description: Aqueous solution of mordant blue 3.

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

(Note: Percentage composition is withheld as a trade secret.)

<u>Component</u>	<u>CAS #</u>	<u>Exposure limits</u>
Mordant blue 3 (C.I. 43820)	3564-18-9	Not established.
Sulfuric acid	7664-93-9	1 mg/m ³ (OSHA, NIOSH (TWA)) 0.2 mg/m ³ (ACGIH TWA, thoracic fraction)

3. HAZARDS IDENTIFICATION

Emergency overview

Dark red liquid.

Irritant to eyes. Not likely to pose a hazard under normal conditions of use.

Potential health effects

(Human health effects only.)

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

Inhalation: Inhalation of vapors during normal conditions of use are not likely to present a health hazard.

Eye: Contact of liquid with eyes will cause irritation.

Skin: Brief contact with skin is nonirritating; extended contact may be irritating.

Ingestion: Effects are unknown but anticipated to be slight.

3. HAZARDS IDENTIFICATION (continued)

Chronic effects: Mordant blue 3 dye is nonhazardous. Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans (NTP, IARC). A carcinogenic hazard is not applicable with Tango Stain since only approximately 0.5% sulfuric acid is in solution to adjust pH.

Signs and symptoms: Brief contact with skin is not likely to produce adverse effects although skin will stain red. Extended contact of liquid with skin may cause irritation. Eyes may water, and coughing may occur. Effects on the gastrointestinal tract may include discomfort and nausea.

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: > 200°F (> 93.3°C) closed cup.

Flammable limit: Not determined.

Autoignition temperature: Not determined.

Flammability classification: Class IIIB Combustible liquid (OSHA).

Flame propagation: None.

Hazardous products of combustion: Very slight chance of carbon oxides and sulfur oxide.

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 precautions are necessary.

6. ACCIDENTAL RELEASE MEASURES

Wear protective gloves, impermeable aprons and splash-proof goggles. Use a damp sponge or mop to remove spilled liquid. Wash contaminated area with water. Discard absorbents and other contaminated solids in a trash receptacle. Liquid waste may be discarded down the drain after neutralization with the approval of wastewater authorities, or may be removed by a licensed waste hauler.

Comply with all applicable governmental regulations on spill reporting and on the handling and disposal of hazardous waste.

7. HANDLING AND STORAGE

Handling: Wear a plastic or rubber apron, protective gloves and splash-proof goggles. Avoid contact with skin and eyes. Do not continue to wear contaminated clothing after a spill.

Storage: Store at room temperature. Do not store in direct sunlight.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering controls: General room ventilation is usually adequate.

Personal protective equipment

Respiratory protection: None needed.

Skin protection: Anatech Ltd. recommends nitrile gloves. Do not use latex surgical gloves for protection. 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: Red liquid.

Odor: None.

Physical state: Liquid.

pH: 0.95 – 1.10.

Vapor pressure: Not determined.

Vapor density: Not determined.

Boiling point: Not determined.

Freezing point: Not determined.

Solubility in water: Complete.

Specific gravity: Not determined.

10. STABILITY AND REACTIVITY

Chemical stability: Stable.

Conditions to avoid: Alkaline materials can alter the staining characteristics of this solution.

Incompatibility with other materials: Strong oxidants.

Hazardous decomposition products: None to any real extent because of low concentration of sulfuric acid.

Hazardous polymerization: None.

11. TOXICOLOGICAL INFORMATION

Acute effects: None known.

Chronic effects/carcinogenicity: Mordant blue 3 dye is nonhazardous. Occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to humans (NTP, IARC). A carcinogenic hazard is not applicable with Tango Stain since only approximately 0.5% sulfuric acid is in solution to adjust pH.

12. ECOLOGICAL INFORMATION

No environmental information is known for this product.

13. DISPOSAL CONSIDERATIONS

Provided approval is granted by local waste water treatment authorities, Tango Stain can be discarded into sanitary sewer system after neutralization (pH 7).

Canadian disposal regulations generally parallel those in the United States.

Follow federal, state (provincial) and local regulations. Proper waste disposal is the generator's responsibility.

14. TRANSPORTATION INFORMATION

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

15. REGULATORY INFORMATION

OSHA (USA): Under the Hazard Communication Standard and the Laboratory Standard, this product is a hazardous material: it is an irritant.

The OSHA Standards cited above mandate that exposed workers receive proper training in the properties of this product, work practices involved with its handling and disposal, and interpretation of its MSDS.

FDA (USA): Tango Stain is for in vitro diagnostic use as a nuclear stain in histology.

16. OTHER INFORMATION

Label warnings: Avoid contact with eyes to prevent irritation. Avoid contact with skin to prevent irritation and staining.

NFPA (National Fire Protection Association) Rating:

General note: This rating is applicable only to safeguard the lives of individuals who may be concerned with fires occurring in an industrial plant or storage location. The ratings provide information to emergency personnel on whether to evacuate the area or how to perform control procedures. It is not descriptive of hazards under normal conditions of occupational use, and is even less applicable to anticipated laboratory-scale use.

Health 0: Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

Flammability 0: Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

Instability 0: Materials that are normally stable even under fire conditions.