

SPI Supplies Division

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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: March 21, 2013

SPI #02576-AB / 02576-MB

SPI-Chem™ Toluidine Blue O

Section 1: Identification

Chemical Name/Synonyms.....Toluidine Blue O;
CI Basic Blue 17;
3-Amino-7-(dimethylamino)-2-methylphenothiazin-5-ium Chloride;
Tolonium Chloride

Chemical family.....Not Known

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name.....SPI #02576-AB/02576-MB SPI-Chem™ Toluidine Blue O

CAS #'s.....92-31-9

Chemical Formula.....C₁₅H₁₆ClN₃S

Hazardous Material Information System USA

Health.....1

Fire Hazard.....0

Reactivity.....0

Personal Protection.....

NFPA Rating (estimated)

Health.....1

Flammability.....0

Reactivity.....0

GHS Classification(s):

None

GHS Hazard Symbol(s)



Signal Word: Warning

Hazard Statement(s):

H316: Causes mild skin irritation

H320: Causes eye irritation.

H335: May cause respiratory irritation

Hazard Symbol(s): Xi irritant

Precautionary Statement(s):

P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Risk Phrase(s):

R36/37/38: Irritating to eyes, respiratory system and skin. [Xi]

Safety Phrase(s):

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

Section 2: Composition

Component	CAS#	EC#	Percent
Toluidine Blue O	92-31-0	202-146-2	> 98%

Section 3: Hazard Identification

Emergency overview: This material is not hazardous by OSHA Hazard Communication Definition.

Main Hazards: Harmful by inhalation, in contact with skin, and if swallowed. Irritating to eyes, respiratory system and skin.

Physical Health Hazards: Dry dust may form respirable particulates if disturbed. If this material gets into the eyes, it could be irritating. Material could be irritating if the dust is inhaled. Could also be irritating if skin is exposed to the dry powder.

Physical state: Dry powder

Color: dark green

Odor: None

Odor threshold: No data available

Potential Health Effects:

Routes of exposure: Eye contact, ingestion, skin contact

Signs and Symptoms of Acute Exposure: This material if used properly, should not pose any kind of real hazard. If the material is used improperly, for example, if the dust is inhaled, it could be very irritating to the respiratory tract.

Eye contact: Mechanical irritation is possible; can be an irritant.

Ingestion: Ingestion is unlikely, but if it does occur, material could be expected to be an irritant. Drink one pint of water after rinsing out mouth first. Try to prevent vomiting. Never give anything to an unconscious person. Seek immediate medical attention.

Section 4: First Aid Measures

Symptoms:

Skin contact: There may be irritation and redness at the site of contact. An itchy rash may occur at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting.

Inhalation: Nausea and stomach pain may occur.

Action:

Skin Contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin area with running water for ten minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye Contact: Wash eyes with clean low-pressure water. Continue to rinse for 15 minutes. Seek medical advice for examination and possible further treatment of the affected eye(s).

Ingestion: If product is swallowed, first rinse out mouth several times to remove material from mouth and to keep more from being swallowed. Give one pint of water. Do not induce vomiting. If unconscious and breathing is OK, place in the recovery position. Seek medical attention at once.

Inhalation: Remove victim from further exposure ensuring your own safety first. If unconscious, and check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the victim sits or lies down. Seek immediate medical attention.

Section 5: Fire Fighting Measures

Extinguishing Media: Use any suitable medium for extinguishing the supporting fire. Use water to keep fire-exposed containers cool. For fire specifically involving this product, use dry foam, dry chemical powder, polymer foam, CO₂, sand, or earth to extinguish the fire.

Exposure Hazards: In combustion emits toxic fumes.

Protection of Fire-Fighters: Protective Equipment/Clothing: Wear a NIOSH approved positive pressure self-contained breathing apparatus and firefighter turnout gear. This should be selected on the basis of the supporting fire. Avoid having the fumes come in contact with skin and eyes.

Section 6: Accidental Release Measures

Personal precautions: Do not attempt to take action without suitable protective clothing. Do not create dust so that there are air borne particulates that could be inhaled.

Environmental precautions: Do not discharge into drains, rivers, or lakes.

Release response: Pick up with dry cloth or sweep up and retain for recycle or disposal. Do not flush spilled material to the sewer or the environment. Waste materials should be put into a labeled disposal container for disposal according to local regulations.

See Sections 8 and 13.

Section 7: Handling and Storage

Handling: Use in well ventilated areas. Wear suitable gloves if prolonged exposure is contemplated. Avoid direct contact with the material.

Storage: Store away from excessive heat and generally in a cool dry place. Keep container tightly closed. Keep away from direct sunlight. Avoid contact with water or humidity. Must only be kept in original packaging.

Section 8: Exposure Controls and Personal Protection

Engineering measures: Ensure that there is mechanical ventilation of the area.

Respiratory protection: Use respiratory protective device with particle filter. Self-contained breathing apparatus must be available in case of emergency. Use NIOSH/MSHA or European Standard EN 149 approved respirator where needed.

Hand protection: Use protective gloves to prevent skin exposure

Eye protection: Use Chemical Safety goggles. Ensure eye bath is readily available.

Skin protection: Use protective clothing with elastic cuffs and closed neck. Boots should be made of PVC.

The product does not present a significant hazard in normal laboratory use as a light microscope stain. The data provided above refer to prolonged contact with large quantities of product.

Section 9: Physical and Chemical Properties

Appearance and Physical State: dark green powder

Odor: None

Boiling Point/Range: Not applicable

pH: Not applicable

Vapor Pressure: Not known/not applicable

Viscosity: Not applicable

Specific Gravity: Solid/Liquid Not known

Water solubility: Soluble

Ethanol solubility: Soluble

Octanol/Water Partition Coefficient in Kow: Specific value not known

Melting/Freezing Point: Not known

Evaporation Rate: Not applicable

Section 10: Stability and Reactivity

Chemical Stability: The product is stable under normal use conditions.

Conditions to Avoid: Excessive heat, sunlight, humidity

Incompatibility (materials to avoid): Strong oxidizing agents

Hazardous Products of Deposition: In combustion, the material emits toxic fumes of Carbon monoxide, Carbon dioxide, Hydrogen chloride, Nitrogen oxides, Sulfur oxides

Reactions with Air and Water: Does not react with air, water or other common materials.

Section 11: Toxicological Information

Route	Species	Test	Value
IVN	Rat	LD ₅₀	28.9 mg/kg
IPR	Rat	LD ₅₀	215 mg/kg

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur. There may be vomiting

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Section 12: Ecological Information

Ecotoxicity: Not applicable

Persistence and degradability: No data available

Bioaccumulative potential: No data available

PBT identification: This substance is not identified as a PBT substance

Section 13: Disposal Considerations

Waste disposal: Arrange for collection by an approved hauler, following federal, state and local regulations.

Another option, assuming it is legal to do so where you are located: Mix or dissolve the material with a combustible material and burn in a chemical incinerator equipped with afterburners and scrubbers.

Disposal of packaging: Arrange for disposal following all federal, state, and local regulations. Clean first with water and the waste water should be discarded as a normal industrial waste, following all federal, state and local rules and regulations.

RCRA P-Series: Not listed

RCRA U-Series: Not listed

Section 14: Transport Information

This product is not classified as dangerous.

DOT Hazard Class: Non-Regulated

UN/NA ID: Not Regulated

Packing Group: Not Applicable

Labels: Not Regulated

Marine Pollutant: No

NAER Guidebook: Not Regulated

DOT Status: Not Regulated

Section 15: Regulatory Information

OSHA Hazards

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

State

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

CAS# 92-31-9 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

WGK (Water Danger/Protection)

CAS# 92-31-9: No information available.

Canada - DSL/NDSL

CAS# 92-31-9 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

Section 16: Other Information

Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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