

Safety Data Sheet

Product No. 19451 Toluidine Blue O, Certified

Issue Date (11-18-14)

Review Date (01-30-15)

Section 1: Product and Company Identification

Product Name: Toluidine Blue O, Certified

Synonym: Tolonium Chloride, Basic Blue 17

Company Name

Ted Pella, Inc., P.O. Box 492477, Redding, CA 96049-2477

Domestic Phone (800) 237-3526 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

International Phone (01) (530) 243-2200 (Mon-Thu. 6:00AM to 4:30PM PST; Fri 6:00AM to 4:00PM PST)

Chemtrec Emergency Number 1-800-424-9300 24 hrs a day.

Section 2: Hazard Identification

GHS Pictograms:



GHS Categories:

Acute Tox. 4 H332 Harmful if inhaled.

Skin Irrit. 2 H315 Causes skin irritation.

Signal Word: Warning

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Label: Xn; Harmful

Label: Xi; Irritant

Risk phrases:

20 - Harmful by inhalation.

36/38 - Irritating to eyes and skin.

Safety phrases:

9 - Keep container in a well-ventilated place.

26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37 - Wear suitable protective clothing and gloves.

60 - This material and its container must be disposed of as hazardous waste.

Health Effects:

NFPA Hazard Rating: Health: 2; Fire: 0; Reactivity: 0

HMIS® Hazard Rating: Health: 2; Fire: 0; Reactivity: 0
(0=least, 1=Slight, 2=Moderate, 3=High, 4=Extreme)

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

Emergency overview:

Appearance: Powder, Dark Green

Immediate effects: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Potential health effects

Primary Routes of entry: Ingestion, inhalation, eye and skin contact.

Signs and Symptoms of Overexposure: ND

Eyes: Irritating to eyes.

Skin: Irritating to skin.

Ingestion: Harmful if swallowed.

Inhalation: Harmful by inhalation.

Chronic Exposure: ND

Chemical Listed As Carcinogen Or Potential Carcinogen: None.

See Toxicological Information (Section 11)

Potential environmental effects

See Ecological Information (Section 12)

Section 3: Composition / Information on Ingredients

Principle Hazardous Component(s) (chemical and common name(s)) (Cas. No)	%	OSHA PEL mg/m ³	ACGIH TLV mg/m ³	NTP	IARC	OSHA regulated
Toluidine Blue O (92-31-9) EC-No. : 202-146-2	≤100	NE	NE	ND	ND	ND

Chemical Name: 3-Amino-70(dimethylamino)-2-Methylphenothiazin-5-ium Chloride

Chemical Family: Thiazin Dye

Chemical Formula: C₁₅H₁₆N₃S.Cl

Section 4: First Aid Measures

If accidental overexposure is suspected

Eye(s) Contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Skin Contact: Immediately wash with water and soap and rinse thoroughly.

Inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

Ingestion: If symptoms persist consult doctor.

Note to physician

Treatment: No further relevant information available.

Medical Conditions generally Aggravated by Exposure: No further relevant information available.

Section 5: Fire Fighting Measures

Flash Point: Not applicable.

Flammable Limits: ND

Auto-ignition point: ND

Fire Extinguishing Media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Fire Fighting Procedures: Mouth respiratory protective device.

Unusual Fire and Explosion Hazards: ND

Hazardous combustion products: ND

DOT Class: None

Section 6: Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled: Personal precautions, protective equipment and emergency procedures: No special measures required.

Environmental precautions: No special measures required.

Methods and material for containment and cleaning up: Ensure adequate ventilation.

Waste Disposal Methods: Dispose of waste according to Federal, State and Local Regulations.

Section 7: Handling and Storage

Precautions to be taken in Handling and Storage: Thorough de-dusting.

Ensure good ventilation/exhaustion at the workplace.

Storage temperature: Requirements to be met by storerooms and receptacles: No special requirements. Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

Storage Pressure: NA

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Ventilation required: Ensure good ventilation/exhaustion at the workplace.

Personal Protection Equipment

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protective gloves: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Skin protection: ND

Eye protection: Tightly sealed goggles

Additional clothing and/or equipment: ND

Exposure Guidelines

See Composition/Information on Ingredients (Section 3)

Section 9 Physical and Chemical Properties

Appearance and Physical State: Powder, Dark Green

Odor (threshold): Odorless (ND)

Specific Gravity (H₂O=1): ND

Vapor Pressure at 20 °C: 23 hPa

Vapor Density (air=1): ND

Percent Volatile by volume: ND

Evaporation Rate (butyl acetate=1): Not applicable.

Boiling Point: 100 °C

Freezing point / melting point: Not determined.

pH: Not applicable.

Solubility in Water: Insoluble.

Molecular Weight: 305.83 g/mol

Section 10: Stability and Reactivity

Stability: ND

Conditions to Avoid: No further relevant information available.

Materials to Avoid (Incompatibility): No further relevant information available.

Hazardous Decomposition Products: No dangerous decomposition products known.

Hazardous Polymerization: ND

Section 11: Toxicological Information

Results of component toxicity test performed: ND

Human experience: ND

Primary irritant effect: On the skin: Irritant to skin and mucous membranes.

On the eye: Irritating effect. Sensitization: No sensitizing effects known.

Additional toxicological information: ND

This product **does not** contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen.

Section 12: Ecological Information

Ecological Information:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information: General notes: Generally not hazardous for water.

Chemical Fate Information: ND

Section 13 Disposal Considerations

RCRA 40 CFR 261 Classification: ND

Recommendation: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Un-cleaned packaging: Recommendation: Disposal must be made according to official regulations.

Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14: Transportation Information

US DOT Information: Not regulated

IATA: Not regulated

Marine Pollutant: No

Canadian TDG: Not regulated

Section 15: Regulatory Information

United States Federal Regulations

MSDS complies with OSHA's Hazard Communication Rule 29, CFR 1910.1200.

SARA: Section 355 (extremely hazardous substances): None of the ingredients is listed.

SARA Title III: Section 313 (Specific toxic chemical listings): None of the ingredients is listed.

RCRA: ND

TSCA (Toxic Substances Control Act): All ingredients are listed.

CERCLA: No

State Regulations

California Proposition 65:

Chemicals known to cause cancer: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.

Chemicals known to cause developmental toxicity: None of the ingredients is listed.

Carcinogenic categories:

EPA (Environmental Protection Agency): None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH): None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health): None of the ingredients is listed.

International Regulations

Canada WHMIS:

Canadian substance listings: Canadian Domestic Substances List (DSL): All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients is listed.

Canadian Ingredient Disclosure list (limit 1%): None of the ingredients is listed.

Europe EINECS Numbers: 202-146-2

Section 16: Other Information

Label Information: Irritant

European Risk and Safety Phrases: See Section 2.

European symbols needed: X harmful, Irritant.

Canadian WHMIS Symbols: D2B - Toxic material causing other toxic effects

Abbreviations used in this document

NE= Not established

NA= Not applicable

NIF= No Information Found

ND= No Data

Disclaimer

Ted Pella, Inc. makes no warranty of any kind regarding the information furnished herein. Users should independently determine the suitability and completeness of information from all sources. While this data is presented in good faith and believed to be accurate, it should be considered only as a supplement to other information gathered by the user. It is the User's responsibility to assure the proper use and disposal of these materials as well as the safety and health of all personnel who may work with or otherwise come in contact with these materials.

SDS Form 0013F1V4