

# Safety Data Sheet

## Nitro Blue Tetrazolium Chloride (NBT), 0.2% Aqueous, pH 7.4

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Nitro Blue Tetrazolium Chloride (NBT), 0.2% Aqueous, pH 7.4

**Catalog Numbers:** SO-1362

**Company Identification:** Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.  
10 ELECTRONICS AVENUE  
DANVERS, MA 01923

**For information, call:** 978-739-4883

**Emergency Number:** 800-424-9300

**For CHEMTREC assistance, call:** 800-424-9300

### Section 2 - Hazards Identification

#### GHS Classifications

Based on available data, the GHS classification criteria are not met.

#### Pictograms or Hazard symbols and Hazard statement(s):

No GHS Hazard Symbols.

#### Hazard Statements:

No GHS Hazard Statements.

#### Precautionary Statements:

No GHS Precautionary Statements.

### Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
298-83-9	Nitro Blue Tetrazolium Chloride (NBT)	0.2 w/v
7732-18-5	Water	Balance

#### Section 4 - First Aid Measures

**Eye Exposure:** In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Remove contact lenses, if present. Call a physician.

**Dermal Exposure:** In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Oral Exposure:** If swallowed, get medical attention. Rinse mouth with water.

**Inhalation Exposure:** If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

#### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

**Hazardous Combustion Products:** Carbon oxides, nitrogen oxides, chlorine, hydrogen chloride gas, potentially hazardous fumes and gases.

**Flash Point:** Not available

**Autoignition Temperature:** Not available

**Explosion Limits, Lower:** Not available

**Upper:** Not available

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

#### Section 6 - Accidental Release Measures

**Procedure(s) of Personal Precaution(s):**

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

**Methods for Cleaning up:** Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains.

## Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Ensure adequate ventilation. Wash thoroughly after handling. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a **refrigerator**. **Light sensitive**. Keep away from incompatible materials.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

### Exposure Limits:

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA - Final PELs
Nitro Blue Tetrazolium Chloride CAS#298-83-9	Not listed	Not listed	Not listed

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** Yellow

**Odor:** Odorless

**Vapor Pressure:** Not available

**Odor Threshold:** Not available

**Vapor Density:** Not available

**pH:** 7.3-7.5

**Relative Density:** Not available

**Melting point/freezing point:** Not available

**Solubility:** Soluble in water

**Boiling Point:** Not available

**Flash Point:** Not available

**Evaporation Rate:** Not available

**Flammability (solid, gas):** Not applicable  
**Partition coefficient: n-octanol/water:** Not available  
**Auto-ignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**Viscosity:** Not available  
**Specific Gravity/Density:** Not available

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal conditions. Store in refrigerator.  
**Conditions to Avoid:** Incompatible materials, excess heat. Avoid light.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon oxides, nitrogen oxides, chlorine, hydrogen chloride gas, potentially hazardous fumes and gases.

## Section 11 - Toxicological Information

**CAS#298-83-9 Nitro Blue Tetrazolium Chloride: RTECS#: XF8045000**

LD50 Oral: 2000 mg/kg (mouse)

LD50 Dermal: Not available

LC50 Inhalation: Not available

**Note: Mutagen per RTECS.**

**Carcinogenicity:** Nitro Blue Tetrazolium Chloride CAS#298-83-9 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

**Information on the likely routes of exposure:** Routes of entry anticipated: oral, dermal, inhalation, and eye.

**Epidemiology:** Not available.

**Teratogenicity:** Not available.

**Reproductive Effects:** Not available.

**Developmental Effects:** Not available.

**Neurotoxicity:** Not available.

**Mutagenicity:** Nitro Blue Tetrazolium Chloride a mutagen per RTECS.

**Specific Target Organ Toxicity, Single Exposure:** Not available.

**Specific Target Organ Toxicity, Repeated Exposure:** Not available.

**Symptoms associated with exposure:** Ingestion may cause stomach irregularities.

**The toxicological properties of this material have not been thoroughly investigated.**

## Section 12 - Ecological Information

**Ecotoxicity:** Do not release to the environment. Do not release to drains.

**Persistence and Degradability:** Soluble in water.

**Bio-accumulative potential:** No information available.

**Mobility:** Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

**DISPOSAL:** Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

**DOT**

Non-Regulated

Section 15 - Regulatory Information

**Canada Regulatory Information**

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

**SDS Creation Date:** 3-21-25

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