

# Safety Data Sheet

Revision Date Jan-1-2024  
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## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifier

Product name: Nitrotetrazolium Blue chloride

Catalog No.: E4025

CAS No.: 298-83-9

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, manufacture of substances.

### 1.3 Details of the supplier of the safety data sheet

Company: Selleck Chemicals

TollFree: +1 877 796-6397

Tel: +1 832 582-8158

Fax: +1 832 582-8590

### 1.4 Emergency telephone number

Emergency phone #: +1 832 582-8158

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

H302 #Harmful if swallowed.

H312 #Harmful in contact with skin.

H315 #Causes skin irritation.

H319 #Causes serious eye irritation.

H332 #Harmful if inhaled.

H335 #May cause respiratory irritation.

Classification according to EU Directives DSD 67/548/EEC or DPD 1999/45/EC

Xn, N Harmful, Dangerous for the environment R22, R50/53

### 2.2 GHS Label elements, including precautionary statements

Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram



Signal word No data available

Hazard statement(s)

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	IF SWALLOWED: Get medical help.
P302+P352	IF ON SKIN: wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do-continue rinsing.
P317	Get emergency medical help.
P319	Get medical help if you feel unwell.
P321	Specific treatment if asked.
P330	Rinse mouth.
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

#### **Supplemental hazard statements**

None.

### **2.3 Other hazards**

None.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.1 Substances**

Synonyms: 2H -Tetrazolium, 2,2-(3,3-dimethoxy[1,1-biphenyl]-4,4-diyl)bis[3- (4-nitrophenyl)-5-phenyl-, chloride (1:2)  
Nitro blue tetrazolium chloride, NBT

Formula:  $C_{40}H_{30}N_{10}O_6 \cdot 2Cl$

Molecular Weight: 817.64

CAS No.: 298-83-9

## **4. FIRST AID MEASURES**

### **4.1 Description of first aid measures**

#### **Eye contact**

Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water. Separate eyelids with fingers to ensure adequate flushing. Promptly call a physician.

#### **Skin contact**

Rinse skin thoroughly with large amounts of water. Remove contaminated clothing and shoes and call a physician.

#### **Inhalation**

Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

### **Ingestion**

Wash out mouth with water; Do NOT induce vomiting; call a physician.

### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2).

### **4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

## **5. FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.

### **5.2 Special hazards arising from the substance or mixture**

During combustion, may emit irritant fumes.

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus and protective clothing.

## **6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Refer to protective measures listed in sections 8.

### **6.2 Environmental precautions**

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

### **6.3 Methods and materials for containment and cleaning up**

Absorb solutions with finely-powdered liquid-binding material (diatomite, universal binders); Decontaminate surfaces and equipment by scrubbing with alcohol; Dispose of contaminated material according to Section 13.

## **7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition.

Store at -20°C(powder) or -80°C( in solvent)

### **7.3 Specific end use(s)**

No data available.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

This product contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Engineering controls**

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

#### **Personal protective equipment**

<b>Eye protection</b>	Safety goggles with side-shields.
<b>Hand protection</b>	Protective gloves.
<b>Skin and body protection</b>	Impervious clothing.
<b>Respiratory protection</b>	Suitable respirator.
<b>Environmental exposure controls</b>	Keep the product away from drains, water courses or the soil. Clean spillages in a safe way as soon as possible.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	solid
<b>Odor</b>	No data available
<b>Odor threshold</b>	No data available
<b>pH</b>	No data available
<b>Melting/freezing point</b>	No data available
<b>Boiling point/range</b>	No data available
<b>Flash point</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower flammability or explosive limits</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Vapor density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	<1 mg/mL
<b>Partition coefficient</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available

### **9.2 Other safety information**

No data available.

## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

No data available.

### **10.2 Chemical stability**

Stable under recommended storage conditions.

### **10.3 Possibility of hazardous reactions**

No data available.

### **10.4 Conditions to avoid**

No data available.

## **10.5 Incompatible materials**

Strong acids/alkalis, strong oxidising/reducing agents.

## **10.6 Hazardous decomposition products**

Under fire conditions, may decompose and emit toxic fumes.

Other decomposition products - no data available.

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

Classified based on available data. For more details, see section 2.

#### **Skin corrosion/irritation**

Classified based on available data. For more details, see section 2.

#### **Serious eye damage/irritation**

Classified based on available data. For more details, see section 2.

#### **Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2.

#### **Germ cell mutagenicity**

Classified based on available data. For more details, see section 2.

#### **Carcinogenicity**

IARC: No component of this product present at a level equal to or greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

Classified based on available data. For more details, see section 2.

#### **Specific target organ toxicity - single exposure**

Classified based on available data. For more details, see section 2.

#### **Specific target organ toxicity - repeated exposure**

Classified based on available data. For more details, see section 2.

#### **Aspiration hazard**

Classified based on available data. For more details, see section 2.

#### **Additional information**

RTECS No.: Unavailable

This information is based on our current knowledge. However the chemical, physical, and toxicological properties have not been completely investigated.

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

No data available.

### **12.2 Persistence and degradability**

No data available.

### **12.3 Bioaccumulative potential**

No data available.

### **12.4 Mobility in soil**

No data available.

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment unavailable as chemical safety assessment not required or not conducted.

## 12.6 Other adverse effects

No data available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### Product

Dispose substance in accordance with prevailing country, federal, state and local regulations.

#### Contaminated packaging

Conduct recycling or disposal in accordance with prevailing country, federal, state and local regulations.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

DOT: -	ADR: 3077.0
IMDG: 3077.0	IATA: 3077.0

### 14.2 UN proper shipping name

DOT: -	ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	IATA: Environmentally hazardous substance, solid, n.o.s.

### 14.3 Transport hazard class(es)

DOT: -	ADR: 9.0
IMDG: 9.0	IATA: 9.0

### 14.4 Packaging group

DOT: -	ADR: III
IMDG: III	IATA: III

### 14.5 Environmental hazards

DOT: -	ADR: yes
IMDG Marine pollutant: yes	IATA: yes

### 14.6 Special precautions for user

No data available.

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

### 15.2 Chemical safety assessment

Chemical safety assessment was not carried out for this product.

## 16. OTHER INFORMATION

The above information is believed to be correct based on our present knowledge but does not purport to be complete. The product is for research use only and for trained personnel. The burden of safe use of this material rests entirely with the user. SELLECK CHEMICALS disclaims all liability for any damage resulting from use of this material.