


MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION	
Product Name:	Nitrotetrazolium Blue
Catalogue Number:	CN-52602
Synonyms:	5,5'-diphenyl-3,3'-bis(4-nitrophenyl)-2,2'-(3,3'-dimethoxybiphenyl-4,4'-ylene)ditetrazolium dichloride NBT
Intended Use:	Laboratory reagent
Company Name:	Denville Scientific Inc.
Address:	P.O. Box 4588, Metuchen, NJ 08840-4588, USA
Telephone:	908-757-7577
Fax:	908-757-7551
Email:	info@denvillescientific.com

2. HAZARDS IDENTIFICATION	
Signal Word: WARNING	
Hazard Class: Acute Toxicity: Category 4	
Nitrotetrazolium Blue is considered harmful by inhalation, in contact with skin and if swallowed.	

3. COMPOSITION / INFORMATION ON INGREDIENTS				
Component:	CAS Number	EC Number	Amount	Hazard Classification
Nitrotetrazolium Blue	298-83-9	206-067-4	98%	Acute Tox. 4. H302, H312, H332

4. FIRST AID MEASURES	
Ingestion:	Do not induce vomiting. Wash out mouth with water provided that the casualty is conscious. Seek medical attention.
Inhalation:	Remove to fresh air and keep warm. Treat symptomatically. Seek medical attention.
Skin:	Wash the affected area thoroughly with water. Remove contaminated clothing. Seek medical attention if irritation persists.
Eyes:	Flush eyes with copious amounts of water for at least 15 minutes, lifting upper and lower lids. Seek medical attention if irritation persists.

5. FIRE-FIGHTING MEASURES	
Extinguishing Media:	Use any media appropriate for the surrounding fire.
Special Fire Fighting Instructions:	Wear self-contained breathing apparatus and full protective clothing.
Hazardous Combustion Products:	Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Precautions:

Evacuate the area. Wear Personal Protective Equipment appropriate for the scale of the spill and potential for exposure. (See Section 8). Avoid contact with skin and eyes. Do not breath dust.

Prevent contamination of drains, sewers, watercourses and ponds.

Methods for Cleaning Up:

Small amounts of material should be wiped up with a damp cloth. Vacuum clean or sweep larger spills, working carefully to avoid the generation of dust. Place in a suitable container and store pending disposal.

Ventilate the area and wash the spill site with water once all material has been picked up.

7. HANDLING AND STORAGE

Handling:

Prevent contact with skin and eyes. Do not breath dust. Do not eat, drink or smoke in the working area. Work in an extracted enclosure wearing protective clothing as required.

Wash hands and exposed skin thoroughly after handling this material.

Storage:

Store in the original, tightly closed container. To avoid deterioration of the product store at 0 – 5 °C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

UK Occupational Exposure Limits:

None relevant.

Engineering Controls:

Work in an extracted enclosure.

Personal Protective Equipment (PPE):

Respiratory protection: Wear respirator fitted with particulate filter if required.

Eye protection: Wear safety glasses, goggles or face shield.

Hand protection: Wear impermeable gloves.

Body protection: Wear overall or laboratory coat. Wear plastic apron, protective sleeves and rubber boots if handling large quantities.

The potential for, and extent of exposure should be taken into account when determining the appropriate PPE to wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow crystalline powder

Melting Point: Around 200 °C

Solubility in Water: Soluble

Explosive Properties: Most organic powders have the potential to form explosible dust clouds in air.

10. STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and pressures.

Conditions to Avoid: Heat, sunlight, moisture.

Materials to Avoid: Strong oxidizing agents, acids and bases.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides, hydrochloric acid.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD₅₀, oral, mouse = 2 g/kg

Health Effects:

Ingestion: Believed to be harmful by ingestion.
Inhalation: Believed to be harmful by inhalation.
Skin: Believed to be harmful in contact with skin.
Eyes: May cause irritation.

Chronic Effects:

Sensitisation: No sensitising effects known.

12. ECOLOGICAL INFORMATION

Do not allow to enter soil. Prevent contamination of drains, sewers, watercourses and ponds.
No additional data.

13. DISPOSAL CONSIDERATIONS

Treat chemical residues as Special Waste.
Dispose via a licensed professional waste disposal service.

14. TRANSPORT INFORMATION

UN Number: Not applicable
Class: Not applicable
Proper Shipping Name: Not applicable
Packing Group: Not applicable

15. REGULATORY INFORMATION

CLP

Signal Word:

WARNING

Hazard Class:

Acute Toxicity: Category 4


Hazard Statements:

H302 Harmful if swallowed
H312 Harmful in contact with skin
H332 Harmful if inhaled

Precautionary Statements:

P261 Avoid breathing dust.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves / protective clothing / eye protection.
P301 + 312 IF SWALLOWED: call a POISON CENTRE or doctor / physician if you feel unwell.
P302 + 352 IF ON SKIN: wash with soap and water.
P304 + 340 IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.



15. REGULATORY INFORMATION (Continued)	
CHIP Classification: HARMFUL	
Risk Phrases: R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.	
Safety Phrases: S22 Do not breath dust S24/25 Avoid contact with skin and eyes S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.	

16. OTHER INFORMATION			
<p>The information provided in this data sheet is correct to the best of our knowledge at the date of publication. It is intended to provide guidance in the safe handling, use, storage, transportation and disposal of the material. The information does not constitute the user's own assessment of workplace risk as required by UK legislation currently in force. Only competent persons within a suitably controlled environment should handle chemicals.</p> <p>Europa Bioproducts Ltd. cannot accept liability for any loss or damage relating to the use of this information.</p> <p>CHIP – The UK Chemicals (Hazard Information and Packaging for Supply) Regulations 2009</p> <p>CLP – The European Regulation on Classification, Labelling and Packaging of Substances and Mixtures. Regulation (EC) No 1272/2008</p>			
MSDS Version No.5			
Issue Date:	24 June 2010	Prepared by:	Brian Houghton
Reason for issue:	Addition of CLP classification. Changes to sections 2, 3, 15, and 16.		