



# SAFETY DATA SHEET

Revision Date: 07<sup>th</sup> September 2017  
According to regulation (EC) No. 1907/2006

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

### 1.1 Product Identifier

Product Name Nitrotetrazolium Blue, Nitro-TB  
Product Code DJ101A  
Synonyms 3,3'-[3,3'-Dimethoxy-(1,1'-biphenyl)-4,4'-diyl]-bis[2-(4-nitrophenyl)-5-phenyl-2H-tetrazolium chloride]  
CAS Number 298-83-9  
EC Number 206-067-4  
Formula  $C_{40}H_{30}Cl_2N_{10}O_6$   
Molecular Weight 817.64  
REACH registration No No data available

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

For research purposes

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

Company Name Europa Bioproducts Ltd  
Address 15-17 North Street, Wicken, Ely, Cambridgeshire, CB7 5XX, UK  
Telephone +44 (0) 1353 721118 : (office hours 9:00 to 17:00 mon-Fri)  
Emergency +44 (0) 1284 811570  
Fax +44 (0) 1353 624589  
Email info@europa-bioproducts.com

### 1.4 Emergency telephone number

During normal office hours: +44 (0)1353 721118 (9:00-17:00 Monday-Friday)  
Outside of office hours +44 (0)1284 811570

In the event of medical emergency, call for an ambulance or emergency medical assistance immediately.

## SECTION 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)  
Acute Toxicity Category 4 (oral)  
Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2  
Specific target organ toxicity-single exposure Category 3

### 2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

#### Hazard Pictogram



Signal Word

#### Hazard Statements

H302  
H315  
H319  
H335

#### Precautionary Statements

#### WARNING

Harmful if swallowed  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation

P261 P264	Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands/face/forearms/clothing thoroughly after handling.
P270 P271 P280	Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P302+P352 P304+P340	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position 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 so. Continue rinsing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth
P332+P313 P337+P313	If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention
P362 P403+P233	Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed.
P405 P501	Store locked up. Dispose of contents/container in accordance with local/regional/international regulations.

### 2.3 Other Adverse Hazards

None known

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance

Product Name	CAS No	Concentration	Classification according to Regulation (EC) No 1272/2008 (CLP)
Nitro-TB	298-83-9	≤100%	Acute Tox. 4: H302, Skin corrosion/irritation 2: H315, Serious eye damage/ eye irritation 2: H319, STOT-SE 3: H335

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of First Aid Measures

#### Following inhalation

If Breathed in, move into fresh air. Seek medical advice if discomfort occurs. If not breathing, give artificial respiration. Call a physician.

#### Following skin contact

Wash off with plenty of water. Remove contaminated clothing and launder before reuse.

#### Following eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

#### Following ingestion

Do not induce vomiting. Wash out mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.

#### Self-protection of the first aider

Please observe all good laboratory practice.

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

No information available

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

No information available.

### **SECTION 5. FIREFIGHTING MEASURES.**

#### **5.1 Extinguishing media**

Use extinguishing media appropriate for the surrounding fire.

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

May emit toxic fumes under fire conditions.

#### **5.3 Advice for fire fighters**

Wear self-contained breathing apparatus and full protective clothing if necessary.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedure.**

Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid formation of dust. Avoid breathing dust, vapours, mist or gas. Avoid contact with skin and clothing.

#### **6.2 Environmental precautions**

Prevent further leakage. Prevent contamination of drains with product.

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

Pick up and collect product in suitable container for disposal.

#### **6.4 Reference to other sections**

See section 8 for information on safe handling.

See section 13 for disposal information.

### **SECTION 7. HANDLING AND STORAGE**

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

Avoid contact with skin and eyes. Avoid formation of dust. Avoid breathing dust, vapours, mist or gas. Wear appropriate protective personal equipment. Use only with adequate ventilation.

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

Store in original, tightly closed container. Store in a cool, dark and dry place.

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

#### **8.1 Control parameters**

Contains no substances with occupational exposure limit values.

#### **8.2 Exposure controls**

##### **Engineering measures**

Ensure adequate ventilation, especially in confined areas.

##### **Respiratory protection:**

Wear suitable respiratory equipment in case of inadequate ventilation.

##### **Protection of hands:**

Wear protective gloves conforming to EU Directive 89/686/EEC and European Standard EN374.

Gloves must be inspected prior to use. Avoid skin contact with product when removing gloves. Dispose of contaminated gloves safely after use.

##### **Eye protection:**

Wear safety glasses with side-shields conforming to European Standard EN166.

##### **Skin and Body Protection:**

Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

**General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not eat or drink whilst working.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance	Yellow crystalline powder
b) Odour	Odourless
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point /boiling range	No data available
g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper / lower flammability or explosion limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
M Relative density	No data available
n) Solubility(ies)	Soluble in water (100mg/10ml)
o) Partition coefficient	No data available
p) Auto ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

### 9.2 Other Information

No additional information available.

## SECTION 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable

### 10.2 Chemical Stability

Stable at a cool, dark and dry place.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

Heat, sunlight, high temperature.

### 10.5 Incompatible Materials

Strong oxidizing agents, strong acids and bases.

### 10.6 Hazardous decomposition products

When decomposed, it may emit toxic fumes of carbon monoxide, carbon dioxide and nitrogen oxides.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity:** No data available  
**Skin corrosion/irritation:** No data available  
**Serious eye damage/irritation:** No data available  
**Carcinogenicity:** No component of this product is present at levels greater than or equal to 0.1% is identified as a possible, probable or confirmed human carcinogen by IARC.  
**Reproductive toxicity:** No data available  
**STOT-SE:** No data available  
**STOT-RE:** No data available  
**Aspiration hazard:** No data available

### 11.2 Potential health effects

Ingestion: May be harmful if swallowed  
 Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.  
 Skin: May be harmful if absorbed through skin. Causes skin irritation.  
 Eyes: Causes serious eye irritation.

### 11.3 Additional information

No additional information is available.

## SECTION 12. ECOLOGICAL INFORMATION

### 12.1 Ecotoxicity

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

No data available

### 12.6 Other adverse effects:

No further relevant information available.

## SECTION 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste Treatment methods

#### Product:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with local regulations.

#### Contaminated packaging:

Dispose of as unused product. Do not reuse empty containers.

## SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR)	Inland waterway (ADN)	Sea (IMDG)	Air (ICAO-TI/IATA- DGR)
14.1 Un No.	Not applicable	Not applicable	Not applicable	Not applicable
14.2 UN Proper shipping name	Not applicable	Not applicable	Not applicable	Not applicable
14.3 Transport hazard class(s)	Not applicable	Not applicable	Not applicable	Not applicable
14.4 Packing Group	Not applicable	Not applicable	Not applicable	Not applicable

**14.5 Environmental Hazards:**

Not applicable

**14.6 Special precautions for user**

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code**

Not applicable

**SECTION 15. REGULATORY INFORMATION**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 [REACH], as amended by Commission Regulation (EU) No. 453/2010.

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

Directive 2012/18/EU of the European Parliament and of the Council of 4<sup>th</sup> July 2012 on the control of major-accident hazards involving dangerous substances.

Regulation (EC) No 1907/2006 of European Parliament and of the Council of 18<sup>th</sup> December 2006 concerning the Registration, Evaluation, Authorisation and restriction of Chemicals (REACH).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16<sup>th</sup> December 2008 on classification, labelling and packaging of substances and mixtures.

**15.2 Chemical Safety Assessment:**

No information available.

**SECTION 16. OTHER INFORMATION**

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.

Europa Bioproducts Ltd. cannot accept liability for any loss or damage relating to the use of this information.

**16.1 Indication of change**

Version Number 8, Revision Date: 07<sup>TH</sup> September 2017

Reason for revision: To incorporate manufacturers updated information according to regulation (EC) No. 1907/2006.

Department issuing msds:

Europa Bioproducts, QC Department.

**16.2 Abbreviations and acronyms**

RID:	Règlement international concernant le transport des marchandises par chemin de fer (Regulations Concerning the International transport of Dangerous Goods by Rail)
ICAO:	International Civil Aviation Organisation
ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG:	International Maritime Code for dangerous Goods
IATA:	International Air Transport Association
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
VbF:	Verordnung über brennbare Flüssigkeiten, Österreich (Ordinance on the storage of combustible liquids, Austria)
PBT:	Persistent, Bioaccumulative and Toxic
vPvB:	very Persistent and very Bioaccumulative
IARC:	International Agency for Research on Cancer
STOT-SE:	Specific target Organ Toxicity- Single Exposure
Acute Tox. 4	Acute Toxicity, Category 4