

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL IDENTIFICATION

PRODUCT NAME: Nitro Blue Tetrazolium, (2,2'-Di-p-nitrophenyl-5,5' -diphenyl-3,3' - (3,3' -dimethoxy-4,4' -diphenylene)-ditetrazolium chloride), NBT

COMMON NAME: Nitro Blue Tetrazolium, NBT

RPI CATALOG #: N66000

SUPPLIER'S NAME: Research Products International Corp.

SUPPLIER'S ADDRESS: 410 North Business Center Drive
Mount Prospect, IL 60056

EMERGENCY CONTACT: 1-800-323-9814

OTHER INFORMATION: 847-635-7330

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 298-83-9

EINECS #: 206-067-4

MOLECULAR FORMULA: $C_{40}H_{30}Cl_2N_{10}O_6$

MOLECULAR WEIGHT: 817.6

Synonyms: NBT (dye) * Nitro Blue Tetrazolium * P-Nitro Blue Tetrazolium * Nitro Blue Tetrazolium Chloride * P-Nitro Blue Tetrazolium Chloride * Nitro Bt * Nitrotetrazolium Blue * P-Nitrotetrazolium Blue* Nitro Tetrazolium Bt* Nitrotetrazolium Chloride Blue * Nitro Blue Tetrazolium Salt * Tetrazolium Nitro Blue* Tetrazolium Nitro Bt *

SECTION 3 - HAZARDS IDENTIFICATION

Label Precautionary Statements: Harmful. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin. Target organ(s): kidneys. Avoid contact with skin. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 4 - FIRST-AID MEASURES

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes. If swallowed, wash out mouth with water provided person is conscious. Call a physician.

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Assure adequate flushing of the eyes by separating the eyelids with fingers.

SECTION 5 - FIRE FIGHTING MEASURES

Extinguishing media: carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedures: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Unusual fire and explosions hazards: emits toxic fumes under fire conditions. Unusual fire and explosions hazards: emits toxic fumes under fire conditions

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

SECTION 7 - HANDLING AND STORAGE

Refer to section 8.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required. Safety shower and eye bath. Do not breathe vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Do not use if skin is cut or scratched. Wash thoroughly after handling. Wash thoroughly after handling. Discard contaminated clothing and shoes. Harmful solid. Irritant. Keep tightly closed. Store in a cool dry place.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical properties

Melting point: 189° C

SECTION 10 - STABILITY AND REACTIVITY

Stability: stable. Conditions to avoid: protect from moisture.

Incompatibilities: protect from moisture, strong oxidizing agents.

Hazardous combustion or decomposition products: carbon monoxide, carbon dioxide, nitrogen oxides, hydrogen chloride gas.

Hazardous polymerization: will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute effects: may be harmful if absorbed through the skin; harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract. Harmful if swallowed. Causes eye and skin irritation. Exposure can cause gastrointestinal disturbances. May cause convulsions. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Target organ(s): eyes, kidneys, liver, heart RTECS #: xf8045000. Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 -DISPOSAL CONSIDERATIONS

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

SECTION 14 - TRANSPORT INFORMATION

Non-regulated.

SECTION 15 - REGULATORY INFORMATION

European information: Harmful. R 20/22, harmful by inhalation and if swallowed. R 36/37/38, irritating to eyes, respiratory system and skin. S 24, avoid contact with skin. S 45, in case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Reviews, standards, and regulations OEL=MAK NOES 1983: HZD x4354; NIS 1; TNF 70; NOS 3; TNE 1560; TFE 1227. EPA GENETOX program 1988, inconclusive: b Subtilis Rec Assay EPA TSCA section 8(b) chemical inventory. US information. This product is subject to sara section 313 reporting requirements.

SECTION 16 - OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Research Products International Corp. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.