



Material Safety Data Sheet

| NFPA | HMIS | Personal Protective Equipment |
|------|---------------|-------------------------------|
| | Health Hazard | |
| | Fire Hazard 0 | |
| | Reactivity 0 | See Section 15. |

| Section 1. Chemical Product and Company Identification | | | | Page Number: 1 |
|--|--|--|-----------------------|--|
| Common Name/ Trade Name | p-Nitro blue tetrazolium chloride | | Catalog Number(s). | NI135 |
| | | | CAS# | 298-83-9 |
| Manufacturer | SPECTRUM CHEMICAL MFG. CORP. | | RTECS | XF8045000 |
| | 14422 S. SAN PEDRO STREET GARDENA, CA 90248 | | TSCA | TSCA 8(b) inventory: p-Nitro blue tetrazolium chloride |
| Commercial Name(s) | Nitro BT | | CI# | Not available. |
| Synonym | Not available. | | | |
| Chemical Name | Not available. | | | EMERGENCY 2 (24hr) 800-424-9300 |
| Chemical Family Not available. | | | CALL (310) 5 | 16-8000 |
| Chemical Formula | C40H30O6N10Cl2 | | | |
| Supplier | SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248 | | | |

| Section 2.Composition and Information on Ingredients | | | | | | |
|--|---|-------|--------------------------|---------------------------|---------------------------|-------------|
| | | | | Exposure Limits | | |
| Name | | CAS # | TWA (mg/m ³) | STEL (mg/m ³) | CEIL (mg/m ³) | % by Weight |
| 1) {p-}Nitro blue tetrazolium chloride 298-83-9 | | | | | 100 | |
| Toxicological Data on Ingredients | Not applicable. | | | | | |
| Section 3. Hazards Identification | | | | | | |
| Potential Acute Health Effects | Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. | | | | | |
| Potential Chronic Health Effects | Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. | | | | | |

Section 4. First Aid Measures

| Eye Contact | No known effect on eye contact, rinse with water for a few minutes. | |
|-------------------------------------|---|--|
| Skin Contact | After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. | |
| Serious Skin Contact Not available. | | |
| Inhalation | Allow the victim to rest in a well ventilated area. Seek immediate medical attention. | |
| Serious Inhalation | Not available. | |
| Ingestion | Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention. | |
| Serious Ingestion | Not available. | |

| Section 5. Fire and Explosion Data | | | |
|--|---|--|--|
| Flammability of the Product | Non-flammable. | | |
| Auto-Ignition Temperature | Not applicable. | | |
| Flash Points | Not applicable. | | |
| Flammable Limits | Not applicable. | | |
| Products of Combustion | These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2), halogenated compounds. | | |
| Fire Hazards in Presence of Various Substances | Not available. | | |
| Explosion Hazards in Presence of Various Substances | Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. | | |
| Fire Fighting Media and Instructions | SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. | | |
| Special Remarks on Fire Hazards | Not available. | | |
| Special Remarks on Explosion Hazards | Not available. | | |
| Section 6. Accidental | Release Measures | | |
| Small Spill | Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by | | |

| Sinni Spin | spreading water on the contaminated surface and dispose of according to local and regional authority requirements. |
|-------------|--|
| Large Spill | Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. |

Section 7. Handling and Storage

Precautions

Storage

No specific safety phrase has been found applicable for this product.

No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

Section 8. Exposure Controls/Personal Protection

| Engineering Controls | No special ventilation requirements. |
|---|---|
| Personal Protection | Safety glasses. Lab coat. |
| Personal Protection in Case of a Large Spill | Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. |

Exposure Limits

Not available.

Section 9. Physical and Chemical Properties

| - | - | | |
|-------------------------------|-----------------|-------|----------------|
| Physical state and appearance | Not available. | Odor | Not available. |
| Molecular Weight | 817.65 g/mole | Taste | Not available. |
| pH (1% soln/water) | Not available. | Color | Not available. |
| Boiling Point | Decomposes. | | |
| Melting Point | 197°C (386.6°F) | | |
| Critical Temperature | Not available. | | |
| Specific Gravity | Not available. | | |
| Vapor Pressure | Not available. | | |
| Vapor Density | Not available. | | |
| Volatility | Not available. | | |
| Odor Threshold | Not available. | | |
| Water/Oil Dist. Coeff. | Not available. | | |
| Ionicity (in Water) | Not available. | | |
| Dispersion Properties | Not available. | | |
| Solubility | Not available. | | |
| | | | |

Section 10. Stability and Reactivity Data Stability The product is stable. Instability Temperature Not available. Conditions of Instability Not available. Incompatibility with various substances Not available. Corrosivity Non-corrosive in presence of glass. Special Remarks on Reactivity Not available.

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| p-Nitro blue tetrazolium chloride | | Page Number: 4 |
|---|--|----------------|
| Special Remarks on Corrosivity | Not available. | |
| Polymerization | No. | |
| Section 11. Toxicol | ogical Information | |
| Routes of Entry | Ingestion. | |
| Toxicity to Animals | LD50: Not available. LC50: Not available. | |
| Chronic Effects on Humans | Not available. | |
| Other Toxic Effects on Humans | Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation. | |
| Special Remarks on Toxicity to Animals | Not available. | |
| Special Remarks on Chronic Effects on Humans | Not available. | |
| Special Remarks on other Toxic Effects on Humans | Not available. | |

Section 12. Ecological Information

| Ecotoxicity | Not available. |
|--|---|
| BOD5 and COD | Not available. |
| Products of Biodegradation | Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. |
| Toxicity of the Products of Biodegradation | The products of degradation are more toxic. |
| Special Remarks on the Products of Biodegradation | Not available. |

Section 13. Disposal Considerations

Waste Disposal

| Section 14. Transport Information | | |
|-------------------------------------|--|--|
| DOT Classification | Not a DOT controlled material (United States). | |
| Identification | Not applicable. | |
| Special Provisions for Transport | Not applicable. | |
| DOT (Pictograms) | | |

| p-Nitro blue tetrazol | ium chloride | | Page Number: 5 | |
|---|--|--------|---|--|
| Section 15. Other Regulatory Information and Pictograms | | | | |
| Federal and State Regulations | TSCA 8(b) inventory: p-Nitro blue tetrazolium chloride | | | |
| California Proposition 65 Warnings | | | | |
| Other Regulations | Not available. | | | |
| Other Classifications | WHMIS (Canada) Not controlled under WHMIS (Canada) | | | |
| | DSCL (EEC) This product is not classified according to the EU regulations. | | | |
| HMIS (U.S.A.) | Health Hazard 1 National Fire Protection Fire Hazard 0 Association (U.S.A.) Reactivity 0 Personal Protection a | Health | Flammability Reactivity Specific hazard | |
| WHMIS (Canada) (Pictograms) | | | | |
| DSCL (Europe) (Pictograms) | | | | |
| TDG (Canada) (Pictograms) | | | | |
| ADR (Europe) (Pictograms) | | | | |
| Protective Equipment | Not applicable. Lab coat. | | | |
| | Not applicable. Safety glasses. | | | |
| | | | | |

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p-Nitro blue tetrazolium chloride

Section 16. Other Information

| MSDS Code | N3430 | |
|---------------------------------------|----------------|---|
| References | Not available. | |
| Other Special Considerations | Not available. | |
| Validated by Sonia Owen on 8/11/2006. | | Verified by Sonia Owen. Printed 9/12/2006. |
| CALL (310) 516-80 | 00 | |

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.