



Material Safety Data Sheet

| NFPA | HMIS | Personal Protective Equipment |
|------|---|-------------------------------|
| | Health Hazard 1 Fire Hazard 1 | |
| | Reactivity 0 | See Section 15. |

| Section 1. Chemical Product and Company Identification | | | | Page Number: 1 |
|--|---|-----------------------|---|----------------|
| Common Name/ Trade Name | Nonyltrimethylammonium Bromide | ethylammonium Bromide | | N2194 |
| | | | CAS# | 1943-11-9 |
| Manufacturer SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248 | | RTECS | Not available. | |
| | | TSCA | TSCA 8(b) inventory: Nonyltrimethylammonium Bromide | |
| Commercial Name(s) | Not available. | | CI# | Not available. |
| Synonym | Not available. | | IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 | |
| Chemical Name | hemical Name Nonyltrimethylammonium Bromide | | | |
| Chemical Family Not available. | | CALL (310) 516-8000 | | |
| Chemical Formula | C12-H28-N.Br | | | |
| Supplier | SPECTRUM LABORATORY PRODUCTS INC. 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) Nonyltrimethylammonium | 1) Nonyltrimethylammonium Bromide 1943-11-9 | | | | | 100 |
| Toxicological Data Nonyltrimethylammonium Bromide on Ingredients LD50: Not available. LC50: Not available. LC50: Not available. | | | | | | |
| Section 3. Hazards Potential Acute Health Effect | | of skin contact (irritant |), of eye contact (irrit | ant), of ingestion, o | of inhalation. | |
| Potential Chronic Health Effects | | | | | | |

Section 4. First Aid Measures

| least 15 minutes. Get medical attention. Skin Contact In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remicontaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Or medical attention. Serious Skin Contact Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medicatention. Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Medical attention. Serious Inhalation Not available. Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to | | |
|---|----------------------|--|
| Serious Skin Contact contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Or medical attention. Serious Skin Contact Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention. Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Or medical attention. Serious Inhalation Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen to clothing such as a collar, tie, belt or waistband. | Eye Contact | Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. |
| attention. Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Serious Inhalation Not available. Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen ticlothing such as a collar, tie, belt or waistband. | Skin Contact | In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. |
| Serious Inhalation Not available. Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen ti clothing such as a collar, tie, belt or waistband. | Serious Skin Contact | Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention. |
| Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen ti clothing such as a collar, tie, belt or waistband. | Inhalation | If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen ti clothing such as a collar, tie, belt or waistband. | Serious Inhalation | Not available. |
| Serious Ingestion Not available. | Ingestion | Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband. |
| | Serious Ingestion | Not available. |

| Section 5. Fire and E | xplosion Data |
|--|---|
| Flammability of the Product | May be combustible at high temperature. |
| Auto-Ignition Temperature | Not available. |
| Flash Points | CLOSED CUP: Higher than 93.3°C (200°F). |
| Flammable Limits | Not available. |
| Products of Combustion | These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2), hydrogen bromide, nitrogen, irritating and toxic fumes and gases. |
| Fire Hazards in Presence of Various Substances | Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks. |
| 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 |

| Section 6. Act | Section 6. Accidental Release measures | | | | |
|----------------|--|--|--|--|--|
| Small Spill | Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements. | | | | |
| Large Spill | Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. | | | | |

Section 7. Handling and Storage

| Precautions | Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents. |
|-------------|--|
| Storage | Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F). |

Section 8. Exposure Controls/Personal Protection

| Engineering Controls | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. | | | |
|---|---|--|--|--|
| Personal Protection | lash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. oves. | | | |
| Personal Protection in Case of a Large Spill | Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. 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 | e Solid. | Odor | Not available. |
|-------------------------------|------------------------|-------|----------------|
| | | Taste | Not available. |
| Molecular Weight | 226.26 g/mole | | |
| pH (1% soln/water) | Not available. | Color | White. |
| Boiling Point | Not available. | | |
| Melting Point | 224.5°C (436.1°F) | | |
| Critical Temperature | Not available. | | |
| Specific Gravity | Not available. | | |
| Vapor Pressure | Not applicable. | | |
| 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 | y and Reactivity Data | | |
| Stability | The product is stable. | | |

| Stability | The product is stable. | | | |
|---|---|--|--|--|
| Instability Temperature | Not available. | | | |
| Conditions of Instability | Excess heat, excess dust generation, incompatible materials | | | |
| Incompatibility with various substances | Reactive with oxidizing agents. | | | |
| | | | | |

Continued on Next Page

| Nonyltrimethylamn | nonium Bromide | Page Number: 4 |
|--|---|-----------------------|
| Corrosivity | Not available. | |
| Special Remarks on Reactivity | Not available. | |
| Special Remarks on Corrosivity | Not available. | |
| Polymerization | Will not occur. | |
| Section 11. Toxicol | ogical Information | |
| Routes of Entry | Inhalation. 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 skin contact (irritant), of ingestion, 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 | Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: Dust may cause eye irritation. Ingestion: May cause irritation of the gastrointestinal (digestive) tract. Inhalation: Dust may cause respiratory tract irritation. Chronic Potential Health Effects: No informaiton found. The toxicological properties of ths substance have not been fully investigated. | |
| Section 12. Ecologi | cal Information | |
| Ecotoxicity | Not available. | |
| BOD5 and COD | Not available. | |
| Products of Biodegradation | Possibly hazardous short term degradation products are not likely. However, long term degarise. | gradation products ma |
| Toxicity of the Products of Biodegradation | The product itself and its products of degradation are not toxic. | |
| Special Remarks on the Products of Biodegradation | Not available. | |
| Section 13. Disposa | I Considerations | |
| Waste Disposal | Waste must be disposed of in accordance with federal, state and local e control regulations. | environmental |

| ort Information | | | | | |
|---|------------------|--|---|---|---|
| | | | | | |
| Not a DOT controlled | material (U | Inited States). | | | |
| Not applicable. | | | | | |
| Not applicable. | | | | | |
| | | | | | |
| Regulatory Informa | tion and | Pictograms | | | |
| TSCA 8(b) inventory: | : Nonyltrime | ethylammonium Bromide | | | |
| | | | | | |
| EINECS: This produc | ct is on the | European Inventory of Existing | g Commerci | al Chemical S | ubstances. |
| WHMIS (Canada) | Not cont | rolled under WHMIS (Canada |). | | |
| DSCL (EEC) | R36/38- I | Irritating to eyes and skin. | S24/25- / | Avoid contact | with skin and eyes. |
| Health Hazard Fire Hazard Reactivity Personal Protection | 1 1 0 E | National Fire Protection Association (U.S.A.) | n Health | | Flammability Reactivity Specific hazard |
| | | - | | | |
| × | | | | | |
| \bigotimes | | | | | |
| \bigotimes | | | | | |
| Glove | es. | | | | |
| | Not applicable. | Not applicable. Image: Constraint of the system Regulatory Information and TSCA 8(b) inventory: Nonyltrime TSCA 8(b) inventory: Nonyltrime Image: Constraint of the system VHMIS (Canada) Not cont DSCL (EEC) R36/38-1 Image: Health Hazard 1 Fire Hazard 1 Reactivity 0 | Not applicable. Image: Constraint of the second s | Not applicable. Image: Constraint of the second s | Not applicable. |

Nonyltrimethylammonium Bromide

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Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Splash goggles.

Lab coat.

| Section 16. Other Information | | | | |
|---------------------------------------|----------------|---|--|--|
| MSDS Code | N3507 | | | |
| 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) 516-8000 | | | | |
| 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.