



SAFETY DATA SHEET

Product Name: Avalon Biomed NeoMTA® 2 Powder

| 1. Product and Company Identification | | | | | |
|--|---|--|---|--|--------------------------|
| Product Name: Avalon Biomed NeoMTA® 2 Powder | | | SDS Code Number: SDS9 | | |
| Trade Name & Synonyms: NeoMTA® 2 Powder | | | Last Revision: 2 | | Effective Date: 4/6/2020 |
| Chemical Name: no name assigned to mixture | | | Manufactured by: NuSmile Ltd. | | |
| CAS. Number: None assigned | | | Address: 3315 W 12 th Street, Houston, TX 77008 USA Website: www.avalonbiomed.com | | |
| Grades or Minor Variant Identities: None | | | Telephone Number: 713-861-0033; Int'l 1-800-346-5133 | | |
| Product Use (for Canada): Powder for mixing with NeoMTA® 2 Gel for dental use. | | | e-mail: info@avalonbiomed.com | | |
| 2. Hazard Identification | | | | | |
| Emergency Overview Dust may irritate throat and respiratory system and cause coughing. Frequent inhalation of dust over a long period of time increase the risk of developing lung diseases. Dust or splashes from the mixed powder may cause permanent eye damage. Dust has an irritating effect on moist skin. Prolonged contact may cause burns. | | | | | |
| Routes of Exposure | Signs and Symptoms | Single, Repeated, or Lifetime Exposure | Severity (Mild, Moderate, Severe) | Acute and Chronic Health Effect(s) of hazardous component | Target Organ(s) |
| Eye | Can cause eye immediate or delayed irritation of cornea. | Single | Mild | - | - |
| Skin | Exposure may cause drying of the skin with mild irritations. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure. | Single | Mild | Acute irritation to skin and mucous membranes. Can aggravate other skin conditions. | - |
| Inhalation | Exposure may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system. | Single | Mild | Frequent inhalation of large quantities, over a long period of time increases the risk of lung diseases. | Lung |
| Ingestion | Internal discomfort or ill effects are possible if large quantities are swallowed. | Single | Mild | Acute irritation | - |
| Other | - | - | - | - | - |
| Medical Conditions Aggravated by Exposure: Pre-existing upper respiratory and lung diseases may be aggravated by inhalation. | | | | | |
| Carcinogenicity (IARC, NTP): None known | | | | | |
| Potential Environmental Effects: Powder with moisture hardens into a solid mass that is not biodegradable. | | | | | |
| 3. Composition of Ingredients | | | | | |
| Hazardous Components | CAS. Number | Lowest Exposure Limits | % | | |
| 3CaO•SiO ₂ - Tricalcium silicate | 12168-85-3 | 4 mg/m ³ | <50 | | |
| Ta ₂ O ₅ - Tantalite | 1314-61-0 | 5 mg/ m ³ | <50 | | |
| 2CaO•SiO ₂ - Dicalcium silicate | 10034-77-2 | 4 mg/ m ³ | <20 | | |
| CaSO ₄ - Calcium sulfate | 7778-18-9 | 5 mg/ m ³ | <5 | | |
| 3CaO•Al ₂ O ₃ - Tricalcium Aluminate | 12042-78-3 | 10 mg/m ³ | <5 | | |
| 4. First Aid Measures | | | | | |
| Routes of Exposure | First Aid Instructions | Immediate Medical Attention | Effects ^d | | |
| | | | Acute | Delaye | |
| Eye | Immediately flush eyes with plenty of water for 15 minutes, while holding eyelids apart. Remove contact lenses. Do not use eye ointments. | Get medical attention immediately, even if no symptoms | - | - | |
| Skin | Immediately flush skin with plenty of cool soapy water. Remove contaminated clothing and wash contact areas thoroughly. Seek prompt medical attention. | - | - | - | |
| Inhalation | Move individual away from exposure into fresh air. If not breathing, give artificial respiration. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Keep patient warm. | Get medical attention. | - | - | |
| Ingestion | If ingestion occurs, flush mouth with water, and drink water or milk. Do not induce vomiting. If vomiting occurs, keep the head lower than chest to avoid aspiration into the lungs. Never give anything by mouth to an unconscious or convulsing person. | Get medical attention. | - | - | |
| Other | Seek medical advice after large-scale exposure (>100 gm) | - | - | - | |
| Note to Physicians (Treatment, Testing, and Monitoring): Treat symptomatically. | | | | | |

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| 5. Fire and Explosive Data | | | |
|---|--|--|-----------------------------------|
| Flashpoint & Method: non-combustible | Flammable (Explosive) Limits in Air LEL/UEL: Not applicable | Autoignition Temperature: Not applicable | Other: none |
| Flame Propagation or Burning Rate (for solids): not applicable | Properties Contributing to Fire Intensity: none | Flammability Classification: 0 | |
| Extinguishing Media: Water spray, foam, carbon dioxide, or dry chemical. | | Extinguishing Media to Avoid: None | |
| Protection and Procedures for Firefighters: Usual. Avoid inhalation of smoke; use a respirator and protective suit. | | | |
| Unusual Fire and Explosion Hazards: Irritating fumes may be released by thermal decomposition. Fumes of silicon dioxide may be evolved from material in a fire. | | | |
| 6. Accidental Release Measures | | | |
| Containment Techniques: Discard in trash. | | | |
| Spill/Leak Clean-Up Procedures and Equipment Wipe up spills with moist rags or vacuum to prevent dust from being dispersed. Discard in trash. Avoid skin contact and inhalation. Dispose of container and unused contents in accordance with federal, state, and local requirements. | | | |
| Evacuation Procedures: N/E Special Instructions: N/E Reporting Requirements: N/E | | | |
| 7. Handling and Storage | | | |
| Handling Practices and Warnings: Powder is caustic. Keep out of eyes, lungs, or contact with mucosal tissues. After incidental contact, wash and rinse with water. Wear suitable gloves and protective glasses during use. NeoMTA 2 powder must be kept well sealed and free of contamination by pyrogens. Protect the powder from humidity. Be careful not to contaminate the powder with a contaminated instrument. Trained personnel use this product exclusively for dental purposes. | | | |
| Storage Practices and Warnings: Store at temperatures at room temperature (25°C/77°F), not refrigerated. Keep bottle tightly closed; material is hydrophilic. Inadequate storage conditions will shorten the shelf life. | | | |
| 8. Exposure Control/Personal Protection | | | |
| Ventilation: Use in a well-ventilated area. | | Other Engineering Controls: None | |
| Routes of Entry: | Personal Protective Equipment (PPE) for Normal Use: | PPE for Emergencies: | |
| Eye/Face | Avoid contact with eyes. | Safety glasses or face shield | |
| Skin | Wear latex or nitrile gloves and avoid skin contact. | Gloves and Face shield | |
| Inhalation | Avoid dust inhalation. | Dust mask or respirator | |
| General Hygiene Considerations and Work Practices: Wear gloves as per universal precautions in dentistry. Wash your hands after use. No eating, drinking, or smoking while handling this product. Wash clothing with spills of material on clothing. | | | |
| Protective Measures During Repair and Maintenance of Contaminated Equipment: Use liquid to remove dust. Use vinegar to dissolve set material. | | | |
| Other Protective Measures and Equipment: N/E | | | |
| 9. Physical and Chemical Characteristics | | | |
| Appearance: Fine, white powder | | Odor: None | |
| Normal Physical State: <input type="checkbox"/> Liquid <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Solid <input type="checkbox"/> _____(Other) | Boiling Point >1800°C, Melting Point >700°C Freezing Point >800°C | | |
| Specific Gravity or Density (H ₂ O=1): 3 g/cc | Solubility in Water: < 3 % | pH: ~12 mixed with water | |
| Vapor Pressure (mm Hg @ 20°C): ~ 0 | Vapor Density (AIR= 1): N/A | Evaporation Rate (Butyl Acetate = 1): N/A | |
| 10. Stability and Reactivity Data | | | |
| Incompatibility (Materials to Avoid): Keep dry to avoid reaction with water and setting. | | | |
| Hazardous Products Produced During Decomposition: May release silica fumes in a fire. | | | |
| Hazardous Polymerization? <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur | Conditions to Avoid: Moisture will react with the powder. | Stability? <input checked="" type="checkbox"/> Stable | <input type="checkbox"/> Unstable |
| 11. Toxicological Information | | | |
| Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data: Toxicity is secondary to effect of caustic powder on moist tissues. | | | |
| 12. Ecological Information | | | |
| Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements: Not biodegradable, non-hazardous. | | | |
| 13. Disposal Considerations | | | |
| Regulations: Dispose of container and unused contents in accordance with federal, state, and local requirements. | | | |
| Properties (Physical/Chemical) Affecting Disposal: Do not spread dust. When mixed with water-based liquid, a solid, non- biodegradable mass will form. | | | |
| 14. Transport Information | | | |
| Regulated for shipping? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Proper Shipping Name: Avalon Biomed NeoMTA® 2 Powder | Packing Group DOT class: NR | |
| Do changes in quantity, packaging, or shipment method change product classification? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Hazard Class: Non-hazardous | Identification Number: None | |
| Other: none | | | |
| 15. Regulatory Information | | | |
| Federal Regulations: Hazard code: Xn (irritant): Components are considered to be hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E - Corrosive Material) and subject to the requirements of WHMIS. | | | |
| TSCA listed | | | |
| Risk phrases: R37/38 Irritating to respiratory system and skin. | R41 Risk of serious damage to eyes. | S25 Avoid contact with eyes. | |
| Safety phrases: S22 Do not breathe dust. | S24 Avoid contact with skin. | S25 Avoid contact with eyes. | |
| S26 In case of eye contact, rinse immediately with plenty of water and seek medical advice. | S45 In case of accident, or if you feel unwell, seek medical advice immediately. | | |
| S36 Wear suitable protective clothing. | | | |
| 16. Other Information | | | |
| This information is based on our present knowledge; however, this shall not constitute a guarantee for a specific product feature. No toxicity data are available for this specific formulation. This health hazard assessment is based on information that is available for its components. | | | |
| N/A= not applicable. N/D= not determined. N/E= not established. | | | |