

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: 1		Effective Date:
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: regulatory@nusmile.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		
			Acute	Delay	
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	
<u>Routes of Entry:</u>	<u>Personal Protective Equipment (PPE) for Normal Use:</u>	<u>PPE for Emergencies:</u>	
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) TSCA listed 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. Risk phrases: R37/38 Irritating to respiratory system and skin. R41 Risk of serious damage to 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. S36 Wear suitable protective clothing. S45 In case of accident, or if you feel unwell, seek medical advice immediately.			
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.			