

SAFETY DATA SHEET

Product Name: Avalon Biomed MTA Plus® GEL

1. Product and Company Identification					
Product Name: Avalon Biomed MTA Plus® GEL			SDS Code Number: SDS3		
Trade Name & Synonyms: MTA Plus® GEL					
Chemical Name: None assigned			Manufactured by: NuSmile Ltd		
CAS. Number: None assigned			Address: 3315 W 12 th Street, Houston, TX, 77008 Website: www.nusmile.com		
Grades or Minor Variant Identities: None			Telephone Number USA: 713-861-0033 / INTL: 1-800-346-5133		
Product Use (for Canada): Water-based liquid for dental use mixed with NeoMTA® or Avalon Biomed Grey MTA Plus® powder for dental use.			e-mail: regulatory@nusmile.com		
2. Hazard Identification					
Emergency Overview: slightly caustic water-based gel solution					
Routes of Exposure	Signs and Symptoms	Single, Repeated, or Lifetime Exposure	Severity (Mild, Moderate, Severe)	Acute and Chronic Health Effect(s)	Target Organ(s)
Eye	May irritate eyes.	Single	Moderate		-
Skin	May irritate skin.	Single	Mild		-
Inhalation	Dust is unlikely to form	Single	Mild		Lung
Ingestion	May irritate mucosal tissues.	Single	Mild		-
Medical Conditions Aggravated by Exposure: none known					
Carcinogenicity (IARC, NTP): none known					
Potential Environmental Effects: miscible with water with no known effects					
3. Composition of Ingredients					
Chemical name: None assigned			CAS number: N/A		
Common Name & Synonyms: MTA Plus® GEL			Hazardous Components: None		
Impurities & Stabilizing additives: None					
Exposure Limits: None			%		
4. First Aid Measures					
Routes of Exposure	First Aid Instructions	Immediate Medical Attention		Effects	
				Acute	Delayed
Eye	Immediately flush eyes with plenty of water for several minutes, while holding eyelids apart. Remove contact lenses. Do not use eye ointments.	Get medical attention immediately, even if no symptoms develop.			
Skin	Immediately flush skin with plenty of cool soapy water.	Get medical attention.			
Inhalation	Supply fresh air. 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 seek medical attention.	Get medical attention.			
Other	Seek medical advice after large-scale exposure.	-			
Note to Physicians (Treatment, Testing, and Monitoring): Treat symptomatically.					
5. Fire and Explosion Data					
Flashpoint & Method: Not applicable to gel	Flammable (Explosive) Limits in Air LEL/UEL: not applicable	Autoignition Temperature: Not applicable		Other: None	
Flame Propagation or Burning Rate (for solids): Not known	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: Fumes of silicon dioxide, carbon dioxide, and carbon monoxide may be evolved from dried material in a fire.					
6. Accidental Release Measures					
Containment Techniques: Discard in trash.					
Spill/Leak Clean-Up Procedures and Equipment: Wipe up with rags immediately to prevent material from being dispersed, and discard in trash. 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: Gel is slightly caustic. Wear suitable gloves and protective glasses during use. Keep out of eyes or contact with mucosal tissues. After incidental contact, wash and rinse with water. MTA Plus® gel must be kept well sealed, and free of contamination by pyrogens. Trained personnel use this product exclusively for dental purposes.					
Storage Practices and Warnings: Store at room temperature (25°C/77°F). Keep bottle tightly closed. Inappropriate storage will shorten the shelf life.					

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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	Wear safety glasses.	Safety glasses or face shield
Skin	Wear latex or nitrile gloves and avoid skin contact.	Gloves and Face shield
Inhalation	Avoid 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 spill.		
Protective Measures During Repair and Maintenance of Contaminated Equipment: Use gloves		
Other Protective Measures and Equipment: N/E		OSHA PELs: None
9. Physical and Chemical Characteristics		
Appearance: Slightly cloudy liquid		Odor: None
Normal Physical State: <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Gas <input type="checkbox"/> Solid <input type="checkbox"/> ____ (Other)		Boiling Point ~100°C Melting Point 0°C Freezing Point 0°C
Specific Gravity or Density (H ₂ O=1): ~1.1	Solubility in Water: Soluble	pH: 7-8
Vapor Pressure (mm Hg @ 20°C): N/D	Vapor Density (AIR= 1): N/D	Evaporation Rate (Butyl Acetate = 1): N/D
Other: Including flammability or explosive limits / Odor / Odor threshold / Flashpoint / any other characteristic as per OSHA brief # 3514: None		
10. Stability and Reactivity Data		
Incompatibility (Materials to Avoid): Do not mix with material other than NeoMTA Plus® powder or Avalon Biomed Grey MTA Plus powder		
Hazardous Products Produced During Decomposition: Decomposition products of the minor components of gel include silicon dioxide, carbon dioxide, and carbon monoxide.		
Hazardous Polymerization? <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> May Not Occur		Conditions to Avoid: Heat
Stability? <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable		Reactivity Considerations: None
11. Toxicological Information		
Toxicity Data, Epidemiology Studies, Carcinogenicity, Neurological Effects, Genetic Effects, Reproductive Effects, or Structure Activity Data Estimated from contents of components. Oral: LD50 >155 gm/kg (guinea pig); LDLo > 250 g/kg (rat); Exhalative LCLo/ 4 hr: 109 g/m ³ / 4 hr (rat); Eye irritation mild: 1.25 gm /24 hr (rabbit)		
Immediate, delayed or chronic effects from long and / or short term exposure: None known		
Description of exposure symptoms: None known		
Potential Carcinogen Indication (NTP, IARC or by OSHA): None		
12. Ecological Information		
Toxicity, Environmental Fate, Physical/Chemical Data, or Other Data Supporting Environmental Hazard Statements: Do not discard in water system. Discard in trash.		
13. Disposal Considerations		
Regulations: Dispose of container and unused contents in accordance with federal, state, and local requirements.		
Properties (Physical/Chemical) Affecting Disposal: None known		
14. Transport Information		
Regulated for shipping? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Proper Shipping Name: MTA Plus® Gel
		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)		
Safety phrases: S22 Harmful if swallowed; S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves, and eye protection. S45 In case of accident, or if you feel unwell, seek medical advice immediately. <u>TSCA listed</u>		
16. Other Information		
This information is based on our present knowledge; however, this shall not constitute a guarantee for a specific product features. 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.		