


# Denatonium Saccharide

## Material Safety Data Sheet

Date Prepared: January 7, 2006  
 Date Revised: November 15, 2010

<b>1. Identification of the Substance and the Company</b>	
<b>Substance:</b>	<b>Denatonium Saccharide</b>
<b>CAS#:</b>	90823-38-4
<b>Chemical Name:</b>	Ammonium, Benzyl diethyl ((2,6,Xylylcarbamoyl) methyl)-Saccharide (Denatonium Saccharide)
<b>Chemical Formula:</b>	C <sub>28</sub> H <sub>33</sub> N <sub>3</sub> O <sub>4</sub> S
<b>Supplier:</b>	Aversion Technologies, Inc 12220 Maycheck Lane Bowie, Maryland 20715 USA
<b>Telephone:</b>	+1-202-657-6300
<b>Emergency:</b>	<b>+1-202-365-9001</b>
<b>Web Address:</b>	www.aversiontech.com
<b>2. Composition:</b>	
<b>Substance:</b>	Denatonium Saccharide
<b>Content %:</b>	100%
<b>3. Hazard Identification</b>	
<b>Potential Acute Health Effects:</b>	Harmful if ingested in large amount
<b>Potential Chronic Health Effects:</b>	Carcinogenic Effects: Not available. Mutagenic Effects: Not available.. Teratogenic Effects: Not available. Developmental Toxicity: Not available.
<b>4. First Aid Measures</b>	
<b>Inhalation:</b>	Remove from exposure immediately and introduce to fresh air.
<b>Ingestion:</b>	Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.
<b>Eye Contact:</b>	Flush immediately with plenty of gently flowing clean water/saline, occasionally lifting eyelids until no evidence of chemical remains. Obtain medical attention immediately.
<b>Skin Contact:</b>	Remove contaminated clothing. Wash exposed areas immediately and thoroughly with mild soap and water. Obtain medical attention if skin is irritated or any symptoms develop.
<b>5. Fire Fighting Measures</b>	
<b>Extinguishing Media:</b>	Use foam, water spray, fog or mist. Carbon dioxide (CO <sub>2</sub> ) dry chemicals. DO NOT USE full water jet.
<b>Special Fire Fighting Procedures:</b>	Use pressurized air mask if substance is involved in a fire. Avoid breathing fire vapors. Fireproof overalls/suit, booths and gloves should be worn.
<b>Unusual Fire and Explosion Hazards:</b>	This product does not pose a particular hazard.
<b>Hazardous Combustion Products:</b>	Fire creates Nitrogen Oxides
<b>6. Accidental Release Measures</b>	
<b>Personal Precautions in Spill:</b>	Wear disposable gloves and overalls. Boots, Air Hood/Respirator is required.
<b>Precautions to Protect Environment:</b>	None
<b>Precautions to Spill Cleanup Methods:</b>	Granules should be dealt with in such a way as to prevent particles being spread in the air causing an unpleasant taste.
<b>7. Handling and Storage</b>	
<b>Usage Precautions:</b>	While handling manually avoid contact with skin, eyes and clothing. Handle using techniques to minimize dust.
<b>Storage Precautions:</b>	Keep dry, ventilated storage and closed containers. Keep separate from food, feed stuffs, fertilizers, and other sensitive materials.
<b>Storage Criteria:</b>	Keep in cool dry place.
<b>8. Exposure Controls/Personal Protection</b>	
<b>Ventilation:</b>	Make certain work areas have adequate ventilation. Minimize dust while handling.
<b>Inhalation:</b>	Use mask or dust respirator if exposed to high concentrations of dust

<b>Eye:</b>	Use goggles when handling or working with this product..
<b>Skin:</b>	Avoid contact with skin. Gloves, lab coat and face shield are recommended.
<b>Hygienic Work Practices:</b>	Wash at the end of each work shift and before eating, smoking, and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. No eating or drinking while working with this material.
<b>9. Physical and chemical properties</b>	
<b>Appearance:</b>	White crystalline powder
<b>Odor/Taste:</b>	Odorless, bitter taste
<b>Melting Point:</b>	176-182°C
<b>Specific Gravity:</b>	0.5-0.8
<b>Solubility in Water:</b>	5% @ 20°C
<b>10. Stability and reactivity</b>	
<b>Stability:</b>	Product stable up to 140°C
<b>Conditions to Avoid:</b>	None known
<b>Materials to Avoid:</b>	Certain strong oxidizing agents such as Sodium Hypochlorite and Hydrogen Peroxide
<b>Hazardous Decomposition Products:</b>	Nitrogen oxides are formed when denatonium benzoate decomposes on heating or when involved in fire
<b>11. Toxicology information</b>	
<b>Oral LD50:</b>	> 500 mg/kg (Rat)
<b>Inhalation:</b>	> 1500 mg/kg (May cause asthmatic reaction in persons allergic to Lignocaine or similar)
<b>Dermal:</b>	> 2000 mg/kg
<b>Eyes:</b>	No information available
<b>Skin:</b>	Low skin sensitivity potential and therefore may be mildly irritating to skin
<b>12. Ecological Information</b>	
Does not bio-accumulate	
<b>LC50 Rainbow Trout:</b>	>1000 mg/l 96 hrs in fresh water
<b>LC50 Shrimp:</b>	400 mg/l 96 hrs in salt water
<b>13. Disposal Considerations</b>	
<b>Disposal Methods:</b>	Dispose of in accordance with local authority requirements. This material should be incinerated in a licensed facility.
<b>14. Transport information</b>	
<b>General:</b>	Not hazardous for transport
<b>TSCA 8(b) inventory:</b>	No
<b>UN No:</b>	N/A
<b>EINECS Number</b>	2230952
<b>CAS No.</b>	90823-38-4
<b>Tariff No :</b>	2924.2995
<b>IATA/ICAO:</b>	This material is not classified as dangerous
<b>15. Regulatory Information</b>	
<b>Label for Supply :</b>	<b>Xn</b> 
<b>Risk Phrases:</b>	R20 Harmful by inhalation R22 Harmful if swallowed
<b>Safety Phrases:</b>	S2 Keep out of reach of children S13 Keep away from food and drink S36 Wear suitable protective clothing S37 Wear suitable gloves S46 If swallowed seek medical advice immediately
<b>16. Other Information</b>	
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