MATERIAL SAFETY DATA SHEET

1. Identification

Product Name: Denatonium Saccharide CAS#: 90823-38-4 Identified uses: Automotive Chemicals, Cosmetics and Personal Care, Daily Necessities, Agricultural Chemicals, Paints and Coatings, Other. Emergency telephone + 91-7296866111	Contact Information: Macsen Laboratories Village Titerdi, Tehsil Girva, Udaipur – 313002 (INDIA) Tel:- +91 – 294 – 2413722 www.macsenlab.com

2. Hazard(s) identification

2.1 Classification of the substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Toxicity Oral	STOT - Single Exposure
Category 4 - (H302)	Category 3 - (H335)

2.2 Label elements

Signal Word – Warning

Hazard Statement
H302 - Harmful if swallowed
H335 - May cause respiratory tract irritation

Precautionary Statements - EU (§28, 1272/2008)
Prevention
P264 Wash hands, face and clothing thoroughly after handling.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P270 Do not eat, drink or smoke while using this product.

Response
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P312 IF SWALLOWED: Call a POSION CENTRE/doctor or physician if you feel unwell
P330 : Rinse mouth.

Storage

P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Other Hazards

No other information available.

3. Composition/Information on Ingredients

Chemical name	CAS-No	EC No	W/ W %	EU - GHS Substance Classification (REGULATION (EC) No 1272/2008)	REACH No.
Denatonium Saccharide	90823-38-4	-	<=100	Acute Tox. 4; H(302)	no data available

4. First-aid measures

4.1 Description of first-aid measures

General advice In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If in contact with eyes, get immediate medical attention.

Skin contact Wash off with soap and plenty of water for at least 15 minutes. Clean contaminated clothing and shoes before reuse or discard if they cannot be thoroughly cleaned. If skin irritation or rash occurs, get medical attention.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth. Do not induce vomiting unless told by physician. If vomiting occurs ensure patient can breathe. Seek medical attention, if you feel unwell.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Seek medical attention, if you feel unwell.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects are described in labeling see section (2) and/or in section 11.

Indication of immediate medical attention and special treatment needed

Treat symptomatically and supportively.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media High pressure water jets may scatter and spread the fire.

5.2 Special hazards arising from the substance or mixture

Special Hazard Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products Carbon oxides, Nitrogen oxides, Sulphur oxides

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of involved material.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Do not eat, drink or smoke while using this product. Avoid contact with skin and eyes. Avoid breathing vapor/mist. Keep unnecessary people away. Isolate area. Keep out of low areas. Vapors can accumulate in low area. Ventilate closed spaces before entering.

6.2 Environmental Precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Follow all label instructions regarding spill clean-up and residual disposal methods.

6.4 Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

7. Handling and storage

7.1 Precautions for Safe Handling

Handling

Avoid contact with skin and eyes. Avoid breathing vapor or mist. Ensure adequate ventilation. Wash thoroughly after handling. Avoid release to environment. Empty containers may contain hazardous residues. Do not reuse empty container.

Hygiene measures

Wash thoroughly after handling. Keep away from food, drink and animal feeding stuffs. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulation. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible material. Do not store in unlabeled containers. Keep out of reach of children. Do not store material near food, feed or drinking water. Use appropriate containment to avoid environmental contamination.

Incompatible material: Strong oxidizing agents

7.3 Specific end uses

Laboratory chemical, Industrial chemical

8. Exposure controls / personal protection

8.1 Control Parameters

Exposure Limits

Derived No Effect level (DNEL)	No information available
Predicted No Effect Concentration	No information available

8.2 Exposure Controls Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective equipment

Eye protection	Avoid contact with eyes. Where there is potential for eye contact have eye flushing equipment available. Tightly fitting safety goggles. Face-shield.
Skin protection	Wear protective gloves/clothing. Long-sleeved clothing.
Hand protection	Wear suitable protective glove/clothing. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Environmental exposure controls	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Local authorities should be advised if significant spillage cannot be contained.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Solid (Crystalline powder)
Physical state	Solid
Odor	No information available
Color	No information available
Odor threshold	No information available

Property	**VALUES**	**Remarks/ Method**
pH	No information available	
Melting point/freezing point	176°C	
Boiling Point/Range	No information available	
Flash Point	No information available	
Flammability (solid, gas)	No information available	
Upper/lower flammability or	No information available	
Explosive limit	No information available	
Density	No information available	
Vapor density	No information available	
Vapor pressure	No information available	
Water solubility	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	

Viscosity	No information available
Oxidizing properties	No information available
Explosive properties	No information available
Surface Tension	No information available

10. Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reaction

No dangerous reaction known

10.4 Conditions to avoid

Excess heat, incompatible material

10.5 Incompatible Materials

Strong oxidizing agents, Bases, acids

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating/toxic gases and vapors.
Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides, Sulphur oxides

11. Toxicological information

11. 1 Information on Toxicological Effects

LD50 ORAL = 1390 mg/kg (rabbit)

Local effect

Inhalation	Based on available information, classification criteria are not met.
Eye contact	May cause slight eye irritation
Skin contact	May cause skin irritation
Ingestion	Harmful if swallowed

Chronic toxicity

Skin Corrosion/Irritation	May cause mild skin irritation
Eye damage/irritation	May cause slight eye irritation
Sensitization	No additional information available
Mutagenic effects	No additional information available
Carcinogenic effects	No additional information available
Reproductive effects	No additional information available
STOT - Single Exposure	May cause respiratory tract irritation
STOT - Repeated exposure	No additional information available

Aspiration hazard No additional information available

12. Ecological information

12.1 Ecotoxicity

No information available

12.2 Persistence and Degradability

No information available

12.3 Bio accumulative Potential

No information available

12.4 Mobility in Soil

No information available.

12.5 Results of PBT and vPvB Assessment

No information available.

12.6 Other Adverse Effects

No information available.

13. Disposal considerations

13.1 Waste Treatment Methods

Waste from Residues / Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Empty container should be taken for local recycling, recovery or waste disposal. Do not re-use container. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

IMDG/IMO	Not Regulated
IATA/ICAO	Not Regulated

15. Regulatory information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

International Inventories

USINV	Listed
TSCA	Listed
EINECS/ELINCS	-
DSL/NDSL	Listed

PICCS	-
ENCS	-
China	Listed
AICS	-
KECL	-

Legend

- : Not Listed/Exempted

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances
AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

ECHA - European chemical agency

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.

Section 16: Other Information

Full text of H-Statements referred to under sections 2 and 3
H302 Harmful if swallowed

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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