spectrum®



SAFETY DATA SHEET

Preparation Date: 03/22/2019	Revision date 03/22/2019	Revision Number: G1
	1. IDENTIFICATION	
Product identifier		
Product code:	D1178	
Product Name:	DENATONIUM SACCHARIDE	
Other means of identification		
Synonyms:	Benzenemethanaminium,	N N diathyle calt with
	N-[2-[(2,6-dimethylphenyl)amino]-2-oxoethyl]-I 1,2-benzisothiazol-3(2H)-one 1,1-dioxide (1:1)	
CAS #:	90823-38-4	
RTECS #	Not available	
CI#:	Not available	
Recommended use of the chem	nical and restrictions on use	
Recommended use:	No information available.	
Uses advised against	No information available	
Supplier:	Spectrum Chemical Mfg. Corp	
	14422 South San Pedro St.	
	Gardena, CA 90248	
	(310) 516-8000	
Order Online At:	https://www.spectrumchemical.com	
Emergency telephone number	Chemtrec 1-800-424-9300	
Contact Person:	Tom Tyner (USA - West Coast)	
Contact Person:	Ibad Tirmiz (USA - East Coast)	
	2. HAZARDS IDENTIFICATION	

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral

Label elements

Warning

Hazard statements Harmful if swallowed Category 4



Hazards not otherwise classified (HNOC) Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Denatonium Saccharide	90823-38-4	100

	4. FIRST AID MEASURES
First aid measures	
General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.
Most important symptoms and effe	cts, both acute and delayed
Symptoms	May cause eye irritation May cause skin irritation May cause respiratory irritation Sneezing Coughing Weakness Imbalance

May cause bad taste in the mouth

Indication of any immediate medical attention and special treatment needed

Notes to Physician:

Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5 FIRE-FIGHTING MEASURES

Extinguishing Media Suitable Extinguishing Media:	Dry chemical. Carbon dioxide (CO2). Water spray mist or foam.
Unsuitable Extinguishing Media:	No information available.
Specific hazards arising from the chemical	
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO2). Sulfur oxides. Nitrogen oxides (NOx).
Specific hazards	May be combustible at high temperatures. Fire may produce irritating and/or toxic gases.
Special Protective Actions for Firefighters	
Specific Methods:	No information available
Special Protective Equipment for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

6. ACCIDENTAL RELEASE MEASURES

and full protective gear

Personal precautions, protective equipment and emergency procedures

Personal Precautions:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Remove all sources of ignition.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.
Methods and material for contain	nment and cleaning up
Methods for containment	Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. All equipment used when handling the product must be grounded. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store away from incompatible materials. Store at room temperature in the original container.

Incompatible Materials:

Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Denatonium Saccharide	90823-38-4	None	None	None	None

Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Denatonium Saccharide	90823-38-4	None	None	None	None

Australia and Mexico

Component	CAS No	Australia	Mexico
Denatonium Saccharide	90823-38-4	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Goggles or Safety glasses with side-shields.
Skin and body protection:	Chemical resistant apron Long sleeved clothing Gloves

Respiratory protection:

Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures:

Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Odor: No information available.

Molecular/Formula weight (g/mole): Flammability (solid, gas) 507.65

Flash Point Tested according to: Not available

Upper Explosion Limit (%): No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available

Appearance: Crystalline powder.

Taste No information available.

no data available

Autoignition Temperature (°C/°F): No information available

Melting point/range(°C/°F): 176-182°C/ 348.8-359.6°F

Bulk density: No information available

pН No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: No information available

Color: White.

Formula C28H33N3O4S

Flashpoint (°C/°F): No information available

Lower Explosion Limit (%): No information available

Decomposition temperature(°C/°F): No information available

Density (g/cm3): No information available

Vapor pressure @ 20°C (kPa): No information available

VOC content (g/L): No information available

Viscosity: No information available

10. STABILITY AND REACTIVITY

Reactivity No information available

Chemical stability		
Stability:	Stable under recommended storage conditions.	
Possibility of Hazardous Reaction	ns: Hazardous polymerization does not occur	
Conditions to avoid:	Heat. Ignition sources. Incompatible materials.	
Incompatible Materials:	Strong oxidizing agents	
Hazardous decomposition	Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.	
Product code: D1178	Product name: DENATONIUM	Page

SACCHARIDE

products:

Other Information Corrosivity:

No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

Component Information

Denatonium Saccharide
CAS No 90823-38-4
LD50/oral/rat = 1430 mg/kg Oral LD50 Rat
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = 1390 mg/kg Oral LD50 Rabbit
Product Information
LD50/oral/rat = Value - Acute Tox = 1430 mg/kg
LD50/oral/mouse = Value - Acute Tox Oral = No information available
LD50/dermal/rabbit Value - Acute Tox = No information available
LD50/dermal/rat VALUE - Acute Tox Dermal = No information available
LC50/inhalation/rat VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available
LC50/Inhalation/mouse VALUE-Vapor = No information available VALUE - Gas = No information available VALUE - Dust/Mist = No information available
Symptoms

Skin Contact:

May cause skin irritation.

Product code: D1178

Product name: DENATONIUM SACCHARIDE

Eye Contact:	May cause eye irritation.
Inhalation	May cause irritation of respiratory tract. Symptoms may include coughing and sneezing.
Ingestion	Harmful if swallowed. May cause digestive (gastointestinal) tract irritation. May cause muscle weakness. May cause bad taste in the mouth.
Aspiration hazard	No information available.
Delayed and immediate effects	as well as chronic effects from short and long-term exposure
Delayed and immediate effects Chronic Toxicity	as well as chronic effects from short and long-term exposure No information available.
-	

Carcinogenic effects:

Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Denatonium Saccharide	90823-38-4	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Denatonium Saccharide					Not listed	Not listed	Not lis

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	No information available

Specific Target Organ Toxicity

STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organs:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available

Bioaccumulative potential: No information available.

Product code: D1178

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Denatonium Saccharide	90823-38-4	None	None	None	None

14. TRANSPORT INFORMATION

DOT

DOT	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Class	No information available
Packing group:	No information available
Emergency Response Guide	No information available
Number	
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	No Information available
Symbol(s):	No information available
Description:	No information available
TDG (Canada)	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No Information available
Description:	No information available
ADR	
UN Number	Not regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Packing group	No information available
Subsidiary Risk:	No information available
IMDG	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Marine Pollutant	No information available

RID	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available
ICAO (air)	
UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
ΙΑΤΑ	
UN Number	Not Regulated
Proper Shipping Name:	No information available
Transport hazard class(es)	No information available
Subsidiary Risk:	No information available
Packing group	No information available
Precautionary Statements -	No information available
Response	
Special Provisions	No information available

15. REGULATORY INFORMATION

International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Denatonium Saccharide	90823-38-4	PresentACTIV E	Not present	Not present	Not present	Present	Not listed	Not present

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

<u>Chemicals Known to the State of California to Cause Cancer:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<u>Chemicals Known to the State of California to Cause Reproductive Toxicity:</u> This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
					Reproductive
				Toxicity	Toxicity:
Denatonium Saccharide	90823-38-4	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Denatonium Saccharide	90823-38-4	None	None	None	None	None

U.S. TSCA

Component	CAS No	TSCA Section 5(a)2 - Chemicals	TSCA 8(d) -Health and Safety
			Reporting
		(SNURS)	
Denatonium Saccharide	90823-38-4	Not Applicable	Not Applicable

Canada

WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification	The WHMIS 2015 classification of this product has not been validated or reviewed yet.
Information:	

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Denatonium Saccharide	90823-38-4	Not Listed	Present

Component	CAS No	CEPA Schedule I - Toxic Substances
Denatonium Saccharide	90823-38-4	Not listed
Component		CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Denatonium Saccharide	90823-38-4	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Denatonium Saccharide	90823-38-4	

EU - CLP (1272/2008)

R-phrase(s)

R22 - Harmful if swallowed

S -phrase(s)

S46 - If swallowed, seek medical advice immediately and show this container or label

Component	CAS No	 Concentration Limits:	Safety Phrases
Denatonium Saccharide	90823-38-4	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xn - Harmful



Disclaimer:

16. OTHER INFORMATION

Preparation Date:	03/22/2019
Revision date	03/22/2019
Prepared by:	Sonia Owen

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet