

Section 1. PRODUCT IDENTIFICATION

Product Identifiers

Product Name: Diaion™ Styrenic Mixed Bed Resin H/OH, Ultra High Purity, Resistivity: >18 MΩ*cm (3 hr.), 300—1180um

CAS number: Mixture

Product Part Numbers: SMT100L

Synonyms: Ion exchange resin.

Recommended use: Chromatography, Laboratory chemicals.

Uses advised against: None known.

Details of the Supplier of the Safety Data Sheet:

Company: Sorbent Technologies, Inc.
5955 Peachtree Corners East
Norcross, GA 30071 USA

Emergency Telephone Number: 1-866-767-2832

Section 2. HAZARD IDENTIFICATION

United States: According OSHA 29 CFR 1910.1200 HCS

GHS Classification of the Substance or Mixture:

Physical hazards: Not classified.

Health hazards: Serious eye damage/eye irritation. Category 2A

Environmental hazards: Not classified.

GHS Label Elements, including Precautionary Statements:

Signal word: Warning



Hazard statement: Causes serious eye irritation.

Emergency Overview: Odorless white or yellowish white spherical beads.

Potential Health Effects: Medical conditions aggravated by exposure: Serious eye damage/eye irritation.

Precautionary statement:

Prevention: Wash thoroughly after handling. Wear eye protection/face protection.

Response: **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Carcinogenic Effects: IARC: Not listed NTP: Not listed OSHA: Not regulated

Other Hazards Not Otherwise Classified (HNOC): None known.

Supplemental information: By contacting with water or solvents, trace level of substances such as (C8H7SO3H)_n, N(CH₃)₃, CH₃OH, C₆H₅COOH, C₆H₅CHO, H₂SO₄, HCHO, etc. may be released into the liquid. Please refer to applicable regulations.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Composition

Components	CAS No.	%
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide.	69011-18-3	10-30
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated.	69011-20-7	10-30
Water	7732-18-5	40-80

Section 4. FIRST AID MEASURES

Description of First Aid Measures

- Skin:** Wash material off skin with soap and water. Seek medical attention if irritation develops and persists.
- Eyes:** Do not rub eyes. Flush with copious amounts of water for 15 minutes while holding eyelids apart. Remove contact lenses, if present and easy to do. Seek medical attention if irritation develops and persists.
- Ingestion:** Rinse the mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content does not get into lungs. Seek medical attention if gastrointestinal symptoms develop.
- Inhalation:** Remove to fresh air. Keep at rest in a position comfortable for breathing. Seek medical attention if cough or respiratory symptoms develop.

Most Important Symptoms and Effects, both acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing redness ,swelling and blurred vision.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General Information

Ensure that medical personnel are aware of the materials involved, and take precautions to protect themselves.

Section 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water fog. Foam. Dry chemicals. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Flash Point: Not applicable.

Non-flammable: OSHA Method 16CFR1500.44 (Incorporated by reference in 29CFR1920.1200).

Flammability Limits in Air: LFL and UFL, Not applicable.

Auto ignition temperature: 752 deg. F (400 DEG. C).

Protective equipment and precautions for firefighters

General fire Hazard: No unusual fire or explosion hazards noted.

Protection of firefighters: Cool containers exposed to heat with water spray and remove container from the fire area if you do so without risk.

Fire Fighting Instructions: Isolate large fires and allow to burn out. Extinguish fire using water fog, fine water spray, carbon dioxide or foam. Avoid stirring up dust clouds.

Fire Fighting Equipment: Fire fighting personnel should wear full protective equipment, including self-contained breathing apparatus (SCBA) for all inside fires and large outdoor fires.

Hazardous Combustion Products: Under certain conditions, any airborne dust be an explosion hazard.

Hazard greater as fineness increases.

Specific methods: Use standard firefighting procedure and consider the hazards of other involved materials.

Section 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing vapors, mist or gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Resins may be slippery. Do not step on the spilled resins. Evacuate non-essential personnel. Wear suitable protective clothing and gloves. For personal protection, see section 13 of this SDS.

Environmental Precautions

Avoid discharge into drains, water courses or onto the ground.

Methods and Material for Containment and Clean-up

The product is immiscible with water and will sediment in water systems.

If a Spill or Leak Occurs: Stop the flow the flow of material, if this is without risk. Ventilate the contaminated area. Dike the spilled material, where this is possible. Wear appropriate protective equipment and clothing during clean-up. Cover with plastic sheet to prevent spreading. Absorb on vermiculite, dry sand or earth and place into containers. Handle in accordance with industrial hygiene and safety practices. These practices include avoiding unnecessary exposure, and removal from eyes, skin, and clothing. Prevent product from entering drains.

Disposal Method: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. Spent should be disposed of in accordance with State and Federal laws.

For waste disposal, see section 13 of this SDS.

Container Disposal: Do not reuse empty bags or drums.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling: Avoid contact with eyes. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage. Keep away from ignition sources. Use in well ventilated areas. Protect containers from physical damage. Wash hands after handling. Avoid release to the environment.

Conditions for Safe Storage, Including any Incompatibilities

Storage: Store in cool, dry, ventilated area and in tightly closed containers. Store above freezing. Keep away from oxidizers, sunlight, heat or flames. Store away from ignition sources. (see Section 10 of the SDS).

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Limits: No exposure limits noted for ingredients.

Biological Limit Values: No biological exposure limits noted for the ingredients.

Component	OSHA PEL	ACGIH TLV
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, (69011-18-3)	Not established	Not established (TWA)
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated.	Not established	Not established (TWA)

ACGIH is the American Conference of Governmental Industrial Hygienists

OSHA is the Occupational Safety and Health Administration

NIOSH is the National Institute of Occupational Safety and Health

PEL is the Permissible Exposure Limits established by OSHA.

TLV is the Threshold Limit Value a term ACGIH uses to express the maximum airborne concentration of a material to which most workers can be exposed during a normal daily and weekly work schedule without adverse effects.

MSHA is the Mine Safety and Health Administration

Exposure Controls

Engineering Controls: Use local exhaust to control emissions near the source. Ventilation systems should be configured to prevent exceeding the recommended or regulated exposure limits (i.e. OSHA PELs).

Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Safety glasses with side shields are recommended for any type of handling. Where eye contact or dusty conditions may likely, dust tight goggles are recommended. Have eye washing equipment available.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. 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. Avoid skin contact with this product. Wear appropriate dust resistant clothing. Wash contaminated clothing and clean protective equipment before reuse. Wash skin thoroughly after handling.

Full contact material: Nitrile rubber of minimum layer thickness 0.11 mm and break through time 480 minutes.

Body protection: Choose protection in relation to its type, to the concentration and the amount of any dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and of the amount of any dangerous substances at the specific workplace.

Respiratory Protection: Follow the OSHA respiratory regulations found in 29 CFR 1910.134 or European Standard EN149. Keep dust exposure to a minimum with engineering and administrative controls.

Use appropriate NIOSH/MSHA approved particulate respirators if necessary. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Use type N95 (US) or type P1 (EN 143) dust masks for nuisance levels of dust.

General Industrial Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.

Environmental Exposure Controls

No special environmental precautions required. Avoid release to the environment.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State:	Solid
Appearance:	Light yellow translucent spherical beads and brown translucent beads.
Odor:	Slight amine-like
Odor Threshold:	No data available
pH:	Not applicable
Melting Point/Range:	Not applicable
Boiling Point/Range:	Not applicable
Flash Point:	Not applicable
Evaporation Rate:	No applicable
Flammability (solid, gas);	No product is not flammable.
Flammability or Explosive Limits	
Upper:	No applicable
Lower:	No applicable
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Relative Density:	1.1 at 25 deg. C (water =1)
Solubility (water):	Insoluble
Solubility (solvents):	Insoluble
Partition Coefficient; n-octanol/water:	Not applicable
Autoignition Temperature:	400 deg. C (752 deg. F)
Decomposition Temperature:	120 deg. C (248 deg. F)
Viscosity:	Not applicable
Bulk density:	0.7 kg/m ³
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidizing
Flammability:	Not applicable

Section 10. STABILITY AND REACTIVITY

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Mixing or contact with oxidants such as nitric acid etc. and nitrates possibly incurs combustion or explosion. Contact with salt solutions generates alkali due to ion exchange.

Chemical Stability

This product is stable under normal conditions of storage, shipment and use. Avoid storing at high temperatures or in direct sunlight.

Possibility of Hazardous Reactions

No dangerous reaction known under conditions of normal use.

Conditions to Avoid

Avoid temperatures exceeding the decomposition temperature. Contact with incompatible materials.

Incompatible Materials

Contact with strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors such as NO_x, SO_x, and carbon oxides, (carbon monoxide and carbon dioxide)

Section 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, chloromethylated, trimethylamine-quaternized, hydroxide	N/A	N/A	N/A
Benzene, diethenyl-, polymer with ethenylbenzene and ethenylethylbenzene, sulfonated.	N/A	N/A	N/A

Information on likely Routes of Exposure:

Inhalation: No adverse effects due to inhalation are expected.

Skin Contact: Health injuries are not known or expected under normal use.

Eye contact: Causes serious eye irritation.

Ingestion: May cause discomfort if swallowed.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long Term Exposure

Toxicological information: Occupational exposure to the substance or mixture may cause adverse effects.

Toxicologically Synergistic Products: No information available.

Skin irritation: Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Respiratory sensitization: Not a respiratory sensitizer.

Skin sensitization: This product is not expected to cause skin sensitization

Carcinogenicity: Table below indicates if each agency has listed any ingredient as a Carcinogen.

Component	CAS-No.	IARC	NTP	ACGIH	OSHA	Mexico
Benzene, diethenyl-, polymer with ethenylbenzene with ethenylbenzene and ethenylethylbenzene chloromethylated, trimethylamine-quaternized, hydroxide	69011-19-4	Not listed	Not listed	Not listed	Not listed	Not listed
Benzene, diethenyl-, polymer with ethenylbenzene with ethenylbenzene and ethenylethylbenzene, sulfonated	69011-20-7	Not listed	Not listed	Not listed	Not listed	Not listed

Germ Cell Mutagenic: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity: This product is not expected to cause reproductive or developmental effects.

Developmental Effects: No information available.

Teratogenicity: No information available.

Specific Target Organ Toxicity (STOT)-single exposure: Not classified.
Specific Target Organ Toxicity (STOT)-repeated exposure: Not classified.

Aspiration: Not an aspiration hazard.

Symptoms / Effects, Both Acute and Delayed: Prolonged inhalation may be harmful.

Endocrine Disruptor Information: No information available.

Other Adverse Effects: The toxicological properties have not been fully investigated.

Section 12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

Persistence/ Degradability

No data is available on the degradability of this product.

Bioaccumulation Potential

No information available.

Aquatic Toxicity

Not expected to be harmful to aquatic organisms.

Mobility in Soil

No information available.

Other Adverse Effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13. DISPOSAL CONSIDERATIONS

Disposal Instructions:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local Disposal Regulations:

Dispose in accordance with all applicable regulations.

Hazardous Waste Code: The waste code should be assigned in the discussion between user, the producer and the waste disposal company.

Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated Packaging: Since empty containers may retain, follow label warnings even after container is emptied. Emptied containers should be taken to an approved waste handling site for recycling or disposal. Local regulations may be more stringent than state or federal requirements.

Section 14. TRANSPORTATION INFORMATION

Land:	DOT (US):	Not regulated as dangerous goods.
	ADR (EU)	
	RID (EU):	Not regulated as dangerous goods.
	TDG (Canada):	Not regulated as dangerous goods.

Water:	IMO/IMDG:	Not regulated as dangerous goods.
Air:	IACO/IATA:	Not regulated as dangerous goods.

Transportation in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable.

Special Precautions for User: No information available

Section 15. REGULATORY INFORMATION

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

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
69011-18-3	X	X	-	-	-	X	X	X	X	X	X
69011-20-7	X	X	-	-	-	X	X	X	X	X	X

X indicates listed

U.S. Federal Regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazardous Communication Standard, 29 CFR 1910.1200.

TSCA: CAS# 69011-18-3 and 69011-20-7 listed on the TSCA inventory. Not regulated.

CERCLA Hazardous Substances and Corresponding RQs: None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

SARA 304 Emergency Release Notifications: Not regulated.

SARA Codes: CAS# 69011-18-3 and 69011-20-7:

SARA 311/312 Hazardous Categorization:

Immediate Health Hazard:	Yes
Delayed Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure:	No
Reactivity Hazard:	No

SARA Section 313(TRI reporting): Not regulated

Clean Air Act:

This material does not contain any hazardous air pollutants, Class 1 Ozone depletors or Class 2 Ozone depletors.

Safe Drinking Water Act:

None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not regulated.

CERCLA: Not listed

U.S. Department of Transportation (DOT)

Reportable Quantity (RQ): No

DOT Marine Pollutant: No

DOT severe Marine Pollutant: No

U.S. Department of Homeland Security (DHS)

This product does not contain any DHS chemicals.

States Right-to-Know

CAS# 69011-18-3 and 69011-20-7

California Prop 65: Not listed. This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts: No regulated

New Jersey Right to Know: No listed

Pennsylvania: No listed

Florida: No data.

Rhode Island: No regulated

Illinois: No data.

Connecticut - Hazardous Air pollutants: No data.

Canadian Classification

WHMIS: Non-controlled.

DSL: Listed.

EEC Council Directives relating to the classification, packaging, and labeling of dangerous substances and preparations.

<u>Risk and Safety Phrases</u> :	R36	Irritating to eyes.
	S2:	Keep out of reach of children.

Mexico—Grade

No information available.

Section 16. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to these products or handling of these products. Customers/users must comply with all applicable health and safety laws, regulations, and orders

SDS REVISION SUMMARY: Revision 000 dated 01/17/2022

This document has been updated to comply with the U.S. OSHA HazCom 2012 Standard replacing the current Legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)