
Section 1. PRODUCT IDENTIFICATION

Product Identifiers

Product Name: Biotechnology Grade AG 1-X8, 200-400 Mesh, Hydroxide Form
CAS number: 60177-39-1

Product Part Numbers: 143-2446

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

This chemical is not considered hazardous by the OSHA hazard Communication Standard (29CFR 1910.1200)

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

GHS Classification of the Substance or Mixture: The product is not classified according to the Globally Harmonized System (GHS).

Physical hazards: Not classified.

Health hazards: Not classified.

Environmental hazards: Not classified.

GHS Label Elements, including Precautionary Statements:

Hazard Symbol: None

Signal word: None

Hazard statement: None

Emergency Overview: Odorless light yellow solid.

Potential Health Effects: Medical conditions aggravated by exposure: None.

Precautionary statement:

Prevention P261: Avoid breathing dust/fume.

P264: Wash thoroughly after handling

Response P314: IF IN EYES: Irrigate for 15 minutes.

P304: IF INHALED: Remove to fresh air.

Storage P402: Store in a dry place.

P404: Store in closed container.

Disposal P501: Dispose of waste and residues including containers in accordance with local authority requirements.

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

Supplemental information: Contact with acids may cause release of toxic gases.

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Characterization:

Ingredient	CAS No.	%
Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl, chloride, Polymer with diethenylbenzene	60177--39-1	50-100
Water	7732-18-5	35—50

Hazardous Impurities: None known

Section 4. FIRST AID MEASURES

Description of First Aid Measures

General advice: No hazards which require special first aid measures.

Skin contact: Wash material off skin with soap and water. Seek medical attention if irritation occurs.

Eyes contact: Flush with copious amounts of water for 15 minutes, lifting lower and upper eyelids. Seek medical attention if irritation occurs.

Ingestion: Rinse mouth with water. Give one or two glasses of water to drink. Seek medical attention if gastrointestinal symptoms develop.

Inhalation: Remove to fresh air. Seek medical attention if cough or respiratory symptoms develop.

Most Important Symptoms and Effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

General Information: Ensure that medical personnel are of materials involved, and take precautions to protect Themselves.

Section 5. FIRE-FIGHTING MEASURES

Extinguishing Media

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

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical: None known.

Flash Point: Not applicable.

Explosion Data

Sensitivity to mechanical impact: None

Sensitivity to static discharge: None

Special 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

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental Precautions

No special environmental precautions required.

Methods and Material for Containment and Clean-up

If a Spill or Leak Occurs: Clean up spills in a manner that does not disperse dust into the air. 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: Sweep up and shovel into suitable containers for disposal. Dispose in a facility for non-hazardous wastes. Spent should be disposed of in accordance with State and Federal laws.

Container Disposal: Do not reuse empty bags or drums. Dispose of used bags in facility permitted for non-hazardous wastes.

Section 7. HANDLING AND STORAGE

Precautions for Safe Handling

Advise **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.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Guidelines: This product as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies..

<u>Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with diethenylbenzene (60177-39-1)	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:	Off white to light yellow granules
Odor:	Odorless
Odor Threshold:	No data available
pH:	No data available
Melting Point/Range:	No data available
Boiling Point/Range:	No data available
Flash Point:	No data available
Evaporation Rate:	No data available
Flammability (solid, gas);	No product is not flammable.
Flammability or Explosive Limits	
Upper:	No data available
Lower:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Relative Density:	No data available
Solubility (water):	Insoluble
Solubility (solvents):	No data available
Partition Coefficient; n-octanol/water:	Not applicable
Autoignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity:	Not applicable
Bulk density:	No data available
Explosive properties:	Not applicable
Oxidizing properties:	Not applicable
Softening point:	Not applicable
VOC Content (%):	Not applicable

Section 10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical Stability

This product is stable under normal conditions of storage, shipment and use.

Possibility of Hazardous Reactions

No dangerous reaction known under conditions of normal use.

Conditions to Avoid

Contact with incompatible materials.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

Section 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with diethenylbenzene	N/A	N/A	N/A

Information on likely Routes of Exposure:

Inhalation: Specific test data for the substance or mixture is not available.

Skin Contact: Specific test data for the substance or mixture is not available.

Eye contact: Specific test data for the substance or mixture is not available.

Ingestion: Specific test data for the substance or mixture is not available.

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

Toxicological information: Based on available data, the classification criteria are not met.

Toxicologically Synergistic Products: No information available.

Skin irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Respiratory sensitization: Based on available data, the classification criteria are not met..

Skin sensitization: Based on available data, the classification criteria are not met.

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

Component	CAS-No.	IARC	NTP	ACGIH	OSHA	Mexico
Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, chloride, polymer with diethenylbenzene	60177-39-1	Not listed	Not listed	Not listed	Not listed	Not listed

Germ Cell Mutagenic: Based on available data, the classification criteria are not met.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

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: No information available.

Symptoms / Effects, Both Acute and Delayed: No information available.

Endocrine Disruptor Information: No information available.

Other Adverse Effects: No information available.

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 effects on the environment.

Persistence/ Degradability

No data is available on the degradability of this product.

Bioaccumulation Potential

No information available.

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.
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Air:	IACO/IATA:	Not regulated as dangerous goods.
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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
60177-39-1	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# 60177-39-1 is 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# 60177-39-1 :

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 depleters or Class 2 Ozone depleters.

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

This product does not contain any substances regulated by state right-to-know regulations.

CAS# 60177-39-1

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 data

New Jersey Right to Know: No data

Pennsylvania: No data

Florida: No data.

Rhode Island: No data.

Illinois: No data.

Connecticut - Hazardous Air pollutants: No data.

EPA Pesticide Registration Number: Not applicable.

Canadian Classification

WHMIS: No data.

DSL: No data.

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

Risk and Safety Phrases: S2: Keep out of reach of children.

Mexico—Grade

No information available.

Section 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association) Rating (USA):

Health : 0
Flammability: 0
Instability: 0
Others: none

HMIS (Hazardous Materials Identification System)Rating (USA):

Health Hazard: 0
Chronic Health Hazard: *
Flammability: 0
Physical Hazard: 0
Personal Protection: E (safety glasses, gloves, dust mask)

0 = Minimal hazard, 1 = Slight hazard, 2 = Moderate hazard, 3 = Severe hazard, 4 = Extreme hazard

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: None

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)