Vasostrict® (vasopressin injection, USP)

Safety Data Sheet

According To Federal Register / Vol. 89, No. 98 / Monday, May 20, 2024 / Rules And Regulations And According To The Hazardous Products Regulation (December 15, 2022).

Date of Issue: 03/05/2025 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Vasostrict® (vasopressin injection, USP)

Synonyms: 8-Arginine vasopressin

1.2. Intended Use of the Product

Indicated to treat residual hypotension in adults with vasodilatory shock

1.3. Name, Address, and Telephone of the Responsible Party

Corporate

Endo USA Inc
870 Parkdale Rd
Rochester, MI 48307 USA
T 1-800-828-9393 (Phone)
1-201-829-9222 (Fax)
Website: www.endo.com
Email: medical.information@endo.com

1.4. Emergency Telephone Number

Emergency Number : VelocityEHS
(800)255-3924 (North America)
+1 (813)248-0585 (International)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified.

2.2. Label Elements

GHS-US/CA Labeling

No labeling applicable according to 29 CFR 1910.1200 and the Hazardous Products Regulations (HPR) SOR/2015-17.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Vasopressin is a potent antidiuretic and vasoconstricting agent. The most common adverse effects reported with use (up to ~100 µg/day) include marked pallor, pounding headache, vertigo, sweating, tremor, and gastrointestinal disturbances (nausea, vomiting, diarrhea, burping, cramps, and a desire to defecate). Women reported uterine cramps/contractions. A syndrome similar to water intoxication (characterized by listlessness, drowsiness, headache, and confusion, with subsequent seizures, coma, and death) has also been reported. Consistent with its activity, the drug may increase blood pressure, slow heart rate, and instigate other cardiovascular effects (e.g, heart block, minor arrhythmias, coronary insufficiency, and heart attack). Hypersensitivity reactions have also occurred. Based on its ability to cause uterine contractions and non-clinical study results described below, vasopressin may adversely affect pregnancy and/or a developing fetus.

2.4. Unknown Acute Toxicity (GHS-US/CA)

No additional information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient Classification
Water	AQUA	(CAS-No.) 7732-18-5	95 – 100	Not classified.
Glucose	Anhydrous dextrose / Cartose / Cerelose / Corn sugar / Dextrose / Dextrose, anhydrous / D-Glucose / .delta.-Glucose / Glucose liquid / D-Glucose, anhydrous /	(CAS-No.) 50-99-7	≤ 5.25	Combustible Dust

	Glucose, anhydrous / Grape sugar / Sugar, grape / GLUCOSE / anhydrous dextrose			
2-Propanol, 1,1,1-trichloro-2-methyl-, hemihydrate	2-Propanol, 1,1,1-trichloro-2-methyl-, hydrate (2:1) / 1,1,1-Trichloro-2-methyl-2-propanol hemihydrate / chlorobutanol hemihydrate / 2-Propanol, 1,1,1-trichloro-2-methyl-hydrate (2:1) / Chlorobutanol hemihydrate	(CAS-No.) 6001-64-5	< 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Argipressin	1,2-Dithia-5,8,11,14,17-pentaazacycloeicosane-10-propionamide, 19-amino-13-benzyl-7-(carbamoylmethyl)-4-[2-[[1-[(carbamoylmethyl)carbamoyl]-4-guanidinobutyl]carbamoyl]-1-pyrrolidinylcarbonyl]-16-p-hydroxybenzyl-6,9,12,15,18-pentaoxo- / 3-(Phenylalanine)-8-arginineoxytocin / 8-L-Arginine-vasopressin / Arg8-vasopressin / Arginine antidiuretic hormone / Arginine-8-vasopressin / Arginine-vasopressin / AVP / Oxytocin, 3-(L-phenylalanine)-8-L-arginine- / Pitressin / Vasopressin, 8-L-arginine- / [8-Arginine]vasopressin / Vasopressin	(CAS-No.) 113-79-1	< 0.1	Acute Tox. 3 (Inhalation), H331 Repr. 1B, H360 STOT SE 1, H370
Hydrochloric acid	Hydrogen chloride / Muriatic acid / HYDROCHLORIC ACID / Hydrochloric acid, anhydrous	(CAS-No.) 7647-01-0	< 0.1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 2, H401
Sodium hydroxide	Caustic soda / Sodium hydroxide (Na(OH)) / SODIUM HYDROXIDE / LYE / Lye solution	(CAS-No.) 1310-73-2	< 0.1	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Acetic acid	Acetic acid, glacial / Ethanoic acid / Ethylic acid / Vinegar acid / ACETIC ACID / Acetic acid solution / Acetic acid ...% / Acetic acid ... %	(CAS-No.) 64-19-7	< 0.1	Flam. Liq. 3, H226 Met. Corr. 1, H290 Acute Tox. 4 (Dermal), H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Sodium acetate trihydrate	Acetate, sodium, trihydrate / Acetic acid, sodium salt, trihydrate / Sodium acetate-3-hydrate / Acetic acid, sodium salt, hydrate (1:1:3) / Sodium acetate	(CAS-No.) 6131-90-4	< 0.1	Combustible Dust

Full text of H-statements: see section 16

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If product is biologically contaminated, follow all institutional protocols concerning the potential release of pathogens.

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion of large quantities may have adverse effects. Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

In the event of an accidental injection, call a poison center and go immediately to the nearest emergency room. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding type of fire.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: None known.

5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray). If product is biologically contaminated, follow all institutional protocols concerning the potential release of pathogens.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Accidental injection may cause pain and swelling at the injection site. Sharps should be handled appropriately to minimize risk of accidents.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, spray. Contaminated sharps should be handled with care and discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled. Contact your local health department for referral to a syringe disposal program. In hospital and workplace settings, contaminated sharps are to be handled in accordance with EC Directive 2010/32/EU.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Do not freeze.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Maximum Storage Period: Vials may be held up to 12 months upon removal from refrigeration to room temperature storage conditions (20°C to 25°C [68°F to 77°F], USP Controlled Room Temperature), anytime within the labeled shelf life. Once removed from refrigeration, unopened vials should be marked to indicate the revised 12 month expiration date. If the manufacturer's original expiration date is shorter than the revised expiration date, then the shorter date must be used. Do not use beyond the manufacturer's expiration date stamped on the vial. Discard vial after 48 hours after the first puncture.

Storage Temperature: 2 – 8 °C Do not freeze.

7.3. Specific End Use(s)

Indicated to treat residual hypotension in adults with vasodilatory shock

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Hydrochloric acid (7647-01-0)		
USA ACGIH	ACGIH OEL C	2 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL C	7 mg/m³
USA OSHA	OSHA PEL C	5 ppm
USA NIOSH	NIOSH REL C	7 mg/m³
USA NIOSH	NIOSH REL C	5 ppm
USA IDLH	IDLH	50 ppm
Alberta	OEL C	3 mg/m³
Alberta	OEL C	2 ppm
British Columbia	OEL C	2 ppm
Manitoba	OEL C	2 ppm
New Brunswick	OEL C	2 ppm
Newfoundland & Labrador	OEL C	2 ppm
Nova Scotia	OEL C	2 ppm
Nunavut	OEL C	2 ppm
Northwest Territories	OEL C	2 ppm
Ontario	OEL C	2 ppm
Prince Edward Island	OEL C	2 ppm
Québec	Plafond (OEL C)	2 ppm
Saskatchewan	OEL C	2 ppm

Yukon	OEL C	7 mg/m³
Yukon	OEL C	5 ppm
Sodium hydroxide (1310-73-2)		
USA ACGIH	ACGIH OEL C	2 mg/m³
USA OSHA	OSHA PEL TWA	2 mg/m³
USA NIOSH	NIOSH REL C	2 mg/m³
USA IDLH	IDLH	10 mg/m³
Alberta	OEL C	2 mg/m³
British Columbia	OEL C	2 mg/m³
Manitoba	OEL C	2 mg/m³
New Brunswick	OEL C	2 mg/m³
Newfoundland & Labrador	OEL C	2 mg/m³
Nova Scotia	OEL C	2 mg/m³
Nunavut	OEL C	2 mg/m³
Northwest Territories	OEL C	2 mg/m³
Ontario	OEL C	2 mg/m³
Prince Edward Island	OEL C	2 mg/m³
Québec	Plafond (OEL C)	2 mg/m³
Saskatchewan	OEL C	2 mg/m³
Yukon	OEL C	2 mg/m³
Acetic acid (64-19-7)		
USA ACGIH	ACGIH OEL TWA	10 ppm
USA ACGIH	ACGIH OEL STEL	15 ppm
USA OSHA	OSHA PEL TWA	25 mg/m³
USA OSHA	OSHA PEL TWA	10 ppm
USA NIOSH	NIOSH REL TWA	25 mg/m³
USA NIOSH	NIOSH REL TWA	10 ppm
USA NIOSH	NIOSH REL STEL	37 mg/m³
USA NIOSH	NIOSH REL STEL	15 ppm
USA IDLH	IDLH	50 ppm
Alberta	OEL STEL	37 mg/m³
Alberta	OEL STEL	15 ppm
Alberta	OEL TWA	25 mg/m³
Alberta	OEL TWA	10 ppm
British Columbia	OEL STEL	15 ppm
British Columbia	OEL TWA	10 ppm
Manitoba	OEL STEL	15 ppm
Manitoba	OEL TWA	10 ppm
New Brunswick	OEL STEL	15 ppm
New Brunswick	OEL TWA	10 ppm
Newfoundland & Labrador	OEL STEL	15 ppm
Newfoundland & Labrador	OEL TWA	10 ppm
Nova Scotia	OEL STEL	15 ppm
Nova Scotia	OEL TWA	10 ppm
Nunavut	OEL STEL	15 ppm
Nunavut	OEL TWA	10 ppm
Northwest Territories	OEL STEL	15 ppm
Northwest Territories	OEL TWA	10 ppm
Ontario	OEL TWAEV	15 ppm
Ontario	OEL TWAEV	10 ppm
Prince Edward Island	OEL STEL	15 ppm

Prince Edward Island	OEL TWA	10 ppm
Québec	VECD (OEL STEV)	37 mg/m³
Québec	VECD (OEL STEV)	15 ppm
Québec	VEMP (OEL TWAEV)	25 mg/m³
Québec	VEMP (OEL TWAEV)	10 ppm
Saskatchewan	OEL STEL	15 ppm
Saskatchewan	OEL TWA	10 ppm
Yukon	OEL STEL	43 mg/m³
Yukon	OEL STEL	25 ppm
Yukon	OEL TWA	25 mg/m³
Yukon	OEL TWA	10 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles or safety glasses with side shields.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Colorless
Odor	:	Faint, charateristic
Odor Threshold	:	No data available
pH	:	3.4 – 3.8
Evaporation Rate	:	No data available
Melting Point	:	No data available
Freezing Point	:	No data available
Boiling Point	:	No data available
Flash Point	:	No data available
Auto-ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Flammability (solid, gas)	:	Not applicable
Lower Flammable Limit	:	No data available
Upper Flammable Limit	:	No data available
Vapor Pressure	:	No data available
Relative Vapor Density at 20°C	:	No data available
Relative Density	:	No data available
Specific Gravity	:	No data available
Solubility	:	Water: Soluble
Partition Coefficient: N-Octanol/Water	:	No data available
Viscosity	:	No data available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability:

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions, Including those Associated with Foreseeable Emergencies:

Hazardous polymerization will not occur.

10.4. Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, and incompatible materials. Do not freeze.

10.5. Incompatible Materials:

Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products:

Thermal decomposition may produce: Carbon oxides (CO, CO_2). Chlorine compounds. Nitrogen oxides. Sulfur oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Likely routes of exposure: Eye contact. Dermal. Ingestion.

Acute Toxicity (Oral): Not classified.

Acute Toxicity (Dermal): Not classified.

Acute Toxicity (Inhalation): Not classified.

LD50 and LC50 Data:

No additional information available

Skin Corrosion/Irritation: Not classified.

Eye Damage/Irritation: Not classified.

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified.

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: Not classified.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: Not classified.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion of large quantities may have adverse effects. Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Water (7732-18-5)	
LD50 Oral Rat	> 90 ml/kg (Source: FOOD_JOURN)
Argipressin (113-79-1)	
ATE US/CA (gas)	700.00 ppmV/4h
ATE US/CA (vapors)	3.00 mg/l/4h
ATE US/CA (dust, mist)	0.50 mg/l/4h
Hydrochloric acid (7647-01-0)	
LD50 Oral Rat	238 – 277 mg/kg (Source: JAPAN_GHS)
LD50 Dermal Rabbit	> 5010 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation Rat	1.68 mg/l (Exposure time: 1 h Source: JAPAN_GHS)
Sodium hydroxide (1310-73-2)	
LD50 Oral Rat	325 mg/kg
LD50 Dermal Rabbit	1350 mg/kg (Source: NLM_HSDB)
Glucose (50-99-7)	
LD50 Oral Rat	25800 mg/kg (Source: NLM_CIP)
Acetic acid (64-19-7)	
LD50 Oral Rat	3310 mg/kg (Source: JAPAN_GHS)

LD50 Dermal Rabbit	1060 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation Rat	11.4 mg/l/4h

2-Propanol, 1,1,1-trichloro-2-methyl-, hemihydrate (6001-64-5)	
ATE US/CA (oral)	500.00 mg/kg body weight

Hydrochloric acid (7647-01-0)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

Hydrochloric acid (7647-01-0)	
LC50 Fish 1	7.45 mg/l (Species: Oncorhynchus mykiss - Exposure time: 96h)

Sodium hydroxide (1310-73-2)	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	40 mg/l

Acetic acid (64-19-7)	
LC50 Fish 1	79 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 - Crustacea [1]	65 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	75 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)

2-Propanol, 1,1,1-trichloro-2-methyl-, hemihydrate (6001-64-5)	
LC50 Fish 1	135 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

12.2. Persistence and Degradability

Vasostrict® (vasopressin injection, USP)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Vasostrict® (vasopressin injection, USP)	
Bioaccumulative Potential	Not established.

Acetic acid (64-19-7)	
Partition coefficient n-octanol/water (Log Pow)	-0.17 (at 25 °C / 77 °F) (at pH 7)

2-Propanol, 1,1,1-trichloro-2-methyl-, hemihydrate (6001-64-5)	
Partition coefficient n-octanol/water (Log Pow)	2.03

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not dispose of waste into sewer. Do not empty into drains.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Not regulated for transport

14.2. In Accordance with IMDG

Not regulated for transport

14.3. In Accordance with IATA

Not regulated for transport

14.4. In Accordance with TDG

Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Hydrochloric acid (7647-01-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active
Listed on the United States SARA Section 302
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)
SARA Section 313 - Emission Reporting	1 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)

Sodium hydroxide (1310-73-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

CERCLA RQ	1000 lb

Glucose (50-99-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Acetic acid (64-19-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

CERCLA RQ	5000 lb

15.2. US State Regulations

Hydrochloric acid (7647-01-0)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Sodium hydroxide (1310-73-2)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

Acetic acid (64-19-7)

U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Massachusetts - Right To Know List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

15.3. Canadian Regulations

Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

Hydrochloric acid (7647-01-0)

Listed on the Canadian DSL (Domestic Substances List)

Sodium hydroxide (1310-73-2)

Listed on the Canadian DSL (Domestic Substances List)

Glucose (50-99-7)

Listed on the Canadian DSL (Domestic Substances List)

Acetic acid (64-19-7)
Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 03/05/2025

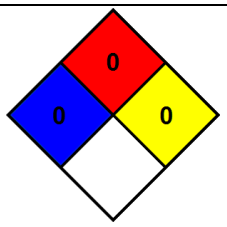
GHS Full Text Phrases:

H226	Flammable liquid and vapor
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H335	May cause respiratory irritation
H360	May damage fertility or the unborn child
H370	Causes damage to organs
H401	Toxic to aquatic life
H402	Harmful to aquatic life

NFPA Health Hazard : 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

NFPA Fire Hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS III Rating

Health : 0 Minimal Hazard - No significant risk to health

Flammability : 0 Minimal Hazard

Physical : 0 Minimal Hazard

Glossary of Data Source Abbreviations

ATSDR: Agency for Toxic Substances and Disease Registry (U.S. Department of Health and Human Services)
AU_WES: Australia WES
CHEMVIEW: ChemView (U.S. Environmental Protection Agency)
EC_RAR: European Commission Renewal Assessment Report
EC_SCOEL: European Commission Scientific Committee on Occupational Exposure Limits
ECETOC: European Centre for Ecotoxicology and Toxicology of Chemicals Reports
ECHA_API: European Chemicals Agency API
ECHA_RAC: ECHA Committee for Risk Assessment
EFSA: European Food Safety Authority
EPA: U.S. Environmental Protection Agency
EPA_AEGL: Acute Exposure Guideline Levels (U.S. Environmental Protection Agency)
EPA_FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act Reregistration Eligibility Decision (U.S. Environmental Protection Agency)
EPA_HPV: High Production Volume Chemicals (U.S. Environmental Protection Agency)
EPA_TRED: Risk Assessment for Tolerance Reassessment Eligibility Decision (U.S. Environmental Protection Agency)
EU_CLH: European Union Harmonised Classification and Labelling Proposal
EU_RAR: European Union Risk Assessment Report
FOOD_JOURN: Food Research Journal (1956)
IARC: The International Agency for Research on Cancer
IDLH: National Institute for Occupational Health and Safety Immediately Dangerous to Life or Health Value Profiles
IUCLID: International Uniform Chemical Information Database
JAPAN_GHS: Japan GHS Basis for Classification Data
JP_J-CHECK: Japan J-Check
KR_NIER: South Korea National Institute of Environmental Research Evaluations
NICNAS: Australia National Industrial Chemicals Notification and Assessment Scheme
NIOSH: National Institute for Occupational Health and Safety (U.S. Department of Health and Human Services)
NLM_CIP: National Library of Medicine ChemID plus database
NLM_HSDB: National Library of Medicine Hazardous Substance Data Bank
NLM_PUBMED: National Library of Medicine PubMed database
NTP: National Toxicology Program
NZ_CCID: New Zealand Chemical Classification and Information Database
OECD_EHSP: Environment, Health, and Safety Publication (Organisation for Economic Co-operation and Development)
OECD_SIDS: Screening Information Data Sets (Organisation for Economic Co-operation and Development)
WHO: World Health Organization

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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