SAFETY DATA SHEET

SPI-Chem™ Glutaraldehyde 25% EM Grade and 25%

Biological Grade

Section 1	1. Identification	
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GHS product identifier	: SPI-Chem™ Glutaraldehyde 25% EM Grade and 25% Biological Grade
Product code	: 02611-AB, 02611-XK, 02607-BA
Other means of identification	: Glutaraldehyde
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Product use	: Laboratory chemicals.
Area of application	: Industrial applications, Professional applications.
Supplier's details	: SPI Supplies Division Structure Probe, Inc. 206 Garfield Ave. West Chester, PA 19380 United States
	Telephone: 1-(610)-436-5400 http://www.2spi.com
E-mail address of person responsible for this SDS	: SDS@2spi.com
Emergency telephone number	: SPI Supplies / Structure Probe Inc.
	Phone: +1 484-313-4165

Section 2. Hazards identification

OSHA/HCS status	: This materia (29 CFR 19	I is considered hazardous by the OSHA Hazard Communication Standard 10.1200).
Classification of the substance or mixture	: H302 H332 H314 H318	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1
	H334 H317 H335	RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
	H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Signal word	: Danger				
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Section 2. Hazards identification

 H302 + H332 - Harmful if swallowed or if inhaled. H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness.
 P280 - Wear protective gloves, protective clothing and eye or face protection. P284 - Wear respiratory protection: Recommended: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/ MSHA or European Standard EN 149 approved respirator w/ full or ½ face N95 cartridge masks if exposure limits are exceeded or symptoms are experienced P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing vapor. P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace.
 P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P303 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
 P405 - Store locked up. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
: Do not taste or swallow. Wash thoroughly after handling.
: Causes digestive tract burns.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Glutaraldehyde
identification	-

Ingredient name	Other names	%	CAS number
water	-	>74	7732-18-5
glutaraldehyde	-	25	111-30-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In the event of any complaints or symptoms, avoid further exposure.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

watering redness

Potential acute health effect	<u>s</u>
Eye contact	: Causes serious eye damage.
Inhalation	: Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin contact	: Causes severe burns. May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can cause central nervous system (CNS) depression.
Over-exposure signs/sympto	<u>oms</u>
Eye contact	: Adverse symptoms may include the following: pain

Section 4. First aid measures

Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing wheezing and breathing difficulties asthma nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate med	ical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters Special protective equipment for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures For non-emergency : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not personnel touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in For emergency responders 2 Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel". **Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Methods and materials for containment and cleaning up Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Large spill Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Storage temperature: 4°C (39.2°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits			
water glutaraldehyde	Inhalation sensi C: 0.05 ppm NIOSH REL (Uni CEIL: 0.2 ppm	None. ACGIH TLV (United States, 1/2023). Skin sensitizer. Inhalation sensitizer. C: 0.05 ppm NIOSH REL (United States, 10/2020).		
Biological exposure indice	S			
None known.	-			
Appropriate engineering controls	: Use only with adequate ventilation. Use process e other engineering controls to keep worker exposur recommended or statutory limits.			
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure the comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.			
Individual protection measu	res			
Hygiene measures	: Wash hands, forearms and face thoroughly after h eating, smoking and using the lavatory and at the techniques should be used to remove potentially of work clothing should not be allowed out of the wor before reusing. Ensure that eyewash stations and workstation location.	end of the working period. Appropriate contaminated clothing. Contaminated kplace. Wash contaminated clothing		
Eye/face protection	: Safety eyewear complying with an approved stand assessment indicates this is necessary to avoid ex or dusts. If contact is possible, the following prote assessment indicates a higher degree of protectio face shield. If inhalation hazards exist, a full-face	posure to liquid splashes, mists, gases ction should be worn, unless the n: chemical splash goggles and/or		
Skin protection				
Hand protection	: Chemical-resistant, impervious gloves complying worn at all times when handling chemical products necessary. Considering the parameters specified during use that the gloves are still retaining their part that the time to breakthrough for any glove materia manufacturers. In the case of mixtures, consisting time of the gloves cannot be accurately estimated	s if a risk assessment indicates this is by the glove manufacturer, check rotective properties. It should be noted al may be different for different glove of several substances, the protection		
Body protection	: Personal protective equipment for the body should performed and the risks involved and should be ap this product.			
Other skin protection	: Appropriate footwear and any additional skin prote based on the task being performed and the risks in specialist before handling this product.			

Section 8. Exposure controls/personal protection

Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator w/ full or ½ face N95 cartridge masks if exposure limits are exceeded or symptoms are experienced.
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Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	: Liquid. [Clear.]
Color	: Colorless to slightly yellow.
Odor	: Sharp.
Odor threshold	: Not available.
рН	: Not available.
Melting point/freezing point	: -21°C (-5.8°F)
Boiling point, initial boiling point, and boiling range	: 101°C (213.8°F)
Flash point	

Flash point			Closed cup		Open cup		
	Ingredient name	°C	°F	Method	°C	°F	Method
	glutaraldehyde	>95	>203				
Evaporation rate	: 0.93 (butyl acetate =	1)					
Flammability	: Not available.						
Lower and upper explosion limit/flammability limit	: Not available.						
Vapor pressure	: 2 kPa (15 mm Hg)						
Relative vapor density	: 1.1 [Air = 1]						
Relative density	: 1.129						
Density	: 1.129 g/cm ³						
Solubility(ies)	: Media		Result				
	water		Soluble				
Miscible with water	: Yes.						
Partition coefficient: n- octanol/water	: Not applicable.						
Auto-ignition temperature	: Not available.						
Decomposition temperature	: Not available.						
SADT	: Not available.						
Viscosity	: Not available.						
Particle characteristics							
Median particle size	: Not applicable.						
Other information							
Physical/chemical properties comments	: No additional information	ation.					

Section 10. Stability and reactivity

	<i>,</i>
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Keep away from extreme heat.
Incompatible materials	: Reactive or incompatible with the following materials: acids and alkalis.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity		
Addie toxicity		VIIOUXOI
	Acuto	UNIONLY

Product/ingredient name	Result	Species	Dose	Exposure
glutaraldehyde	LC50 Inhalation Dusts and mists LD50 Dermal	Rabbit - Male,	480 mg/m³ >2000 mg/kg	4 hours -
	LD50 Oral	Female Rat	134 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
glutaraldehyde	Eyes - Severe irritant	Rabbit	-	1 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250	-
	Skin - Mild irritant	Rabbit	-	ug 13 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-

Sensitization

Not available.

Mutagenicity	
Conclusion/Summary	: Not available.
Carcinogenicity	
Conclusion/Summary	: Not available.
Reproductive toxicity	
Conclusion/Summary	: Not available.
Teratogenicity	
Conclusion/Summary	: Not available.
Specific target organ toxi	<u>icity (single exposure)</u>

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Name		Category	Route of exposure	Target organs	
glutaraldehyde		Category 3	-	Respiratory tract irritation	
		Category 3		Narcotic effects	
Specific target organ toxici	ty (repeated exposure	<u>)</u>			
Not available.					
Aspiration hazard Not available.					
nformation on the likely routes of exposure	: Routes of entry an	ticipated: Oral, Dermal, Inl	halation, Eyes.		
Potential acute health effects	<u>s</u>				
Eye contact	: Causes serious ey	/e damage.			
Inhalation	drowsiness or dizz	. Can cause central nervo ciness. May cause respirat thing difficulties if inhaled.			
Skin contact	• •	rns. May cause an allergio	c skin reaction.		
Ingestion	: Harmful if swallowed. Corrosive to the digestive tract. Causes burns. Can cause cer nervous system (CNS) depression.				
Symptoms related to the phy	ysical, chemical and to	oxicological characterist	<u>ics</u>		
Eye contact	: Adverse symptoms pain watering redness	s may include the following	g:		
Inhalation	: Adverse symptoms respiratory tract irr coughing wheezing and brea asthma nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness	athing difficulties	g:		
Skin contact	: Adverse symptoms pain or irritation redness blistering may occ	s may include the following ur	g:		
Ingestion	: Adverse symptoms stomach pains	s may include the following	g:		
Delayed and immediate effect	cts and also chronic e	ffects from short and lor	<u>ng term exposure</u>		
Short term exposure					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.				
Long term exposure					

Section 11. Toxicological information

Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	(vapors)	Inhalation (dusts and mists) (mg/ I)
SPI-Chem™ Glutaraldehyde 25% EM Grade and 25% Biological Grade glutaraldehyde	536.0 134	10000 2500	N/A N/A	N/A N/A	1.9 0.48

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
glutaraldehyde	Acute EC50 0.6 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 0.75 ppm Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 5.4 ppm Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 0.025 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 3.41 ppm	Fish - Oncorhynchus mykiss	97 days

Conclusion/Summary : Not available.

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
glutaraldehyde	OECD 301A Ready Biodegradability - DOC Die-Away Test	90 to 100 %	5 - Readily - 28 days	-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
glutaraldehyde	-		-		Readily	

Bioaccumulative potential

Date of issue/Date of revision

e : No previou

Section 12. Ecological information

Product/ingredient name	LogPow	BCF	Potential
water	-1.38	-	Low
glutaraldehyde	-0.36	-	Low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	IMDG	ΙΑΤΑ
UN number	UN3265	UN3265	UN3265
UN proper shipping name	Corrosive liquid, acidic, organic, n.o.s. (glutaraldehyde)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (glutaraldehyde)	Corrosive liquid, acidic, organic, n.o.s. (glutaraldehyde)
Transport hazard class(es)	8 CORROLITE	8	8
Packing group	П	II	П
Environmental hazards	No.	Yes.	No.

Additional information

DOT Classification	 Limited quantity Yes. <u>Packaging instruction</u> Exceptions: 154. Non-bulk: 202. Bulk: 242. <u>Quantity limitation</u> Passenger aircraft/rail: 1 L. Cargo aircraft: 30 L. <u>Special provisions</u> 148, B2, IB2, T11, TP2, TP27
IMDG	: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency schedules</u> F-A, S-B <u>Special provisions</u> 274

Section 14. Transport information

to IMO instruments	: Not available.
Transport in bulk according	
Special precautions for user	: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
ΙΑΤΑ	 The environmentally hazardous substance mark may appear if required by other transportation regulations. <u>Quantity limitation</u> Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840. <u>Special provisions</u> A3, A803

U.S. Federal regulations : TSCA 8(a) PAIR: glutaraldehyde TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are active or exempted. **Clean Air Act Section 112** : Not listed (b) Hazardous Air **Pollutants (HAPs)** Clean Air Act Section 602 : Not listed **Class | Substances** Clean Air Act Section 602 : Not listed **Class II Substances DEA List I Chemicals** : Not listed (Precursor Chemicals) : Not listed **DEA List II Chemicals** (Essential Chemicals) SARA 302/304 **Composition/information on ingredients** No products were found. **SARA 304 RQ** : Not applicable. SARA 311/312 Classification : ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 **RESPIRATORY SENSITIZATION - Category 1** SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -Category 3 HNOC - Corrosive to digestive tract

Composition/information on ingredients

Date of issue/Date of revision

: 08/18/2023 Date of previous issue

ious issue : No n

Section 15. Regulatory information

	-	
Name	%	Classification
glutaraldehyde	25	ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 HNOC - Corrosive to digestive tract

SARA 313

Not applicable.

State regulations

Massachusetts

: The following components are listed: GLUTARALDEHYDE

New York

- : None of the components are listed.
- New Jersey Pennsylvania
- The following components are listed: GLUTARALDEHYDEThe following components are listed: PENTANEDIAL

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

<u>Chemical Weapon Convention List Schedules I, II & III Chemicals</u> Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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Section 16. Other information

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Classification	Justification
ACUTE TOXICITY (oral) - Category 4	Calculation method
ACUTE TOXICITY (inhalation) - Category 4	Calculation method
SKIN CORROSION - Category 1B	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method
RESPIRATORY SENSITIZATION - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -	Calculation method
Category 3	
History	

<u>Instory</u>	
Date of issue/Date of revision	: 08/18/2023
Date of previous issue	: No previous validation
Version	: 1
Prepared by	: Sphera Solutions
Key to abbreviations	: ATE = Acute Toxicity Estimate
	AMP = Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift
	BCF = Bioconcentration Factor
	GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association
	IBC = Intermediate Bulk Container
	IMDG = International Maritime Dangerous Goods
	LogPow = logarithm of the octanol/water partition coefficient
	MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available
	UN = United Nations
References	: HCS (U.S.A.) - Hazard Communication Standard International transport regulations

V Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.