Printing date 06/14/2024

Reviewed on 06/14/2024

1 Identification

- · Product identifier
- Trade name: <u>Starch Solution Special</u> <u>Preserved with Acetic Acid</u>
- · Article number: SPX199
- Details of the supplier of the safety data sheet • Manufacturer/Supplier: Aqua Solutions, Inc. 6913 Highway 225

DEER PARK, TX 77536 USA 800-256-2586

- Information department: Technical Coordinator Sherman Nelson shermann@aquasolutions.org • Emergency telephone number:
- *Chemtrec:* 800-424-9300 *Canutec:* 613-996-6666

2 *Hazard*(*s*) *identification*

· Classification of the substance or mixture



Sensitization - Skin 1 H317 May cause an allergic skin reaction.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms*



Signal word Warning Hazard-determining components of labeling:

Acetic Acid, Glacial • Hazard statements May cause an allergic skin reaction. • Precautionary statements Wear protective gloves / eye protection. If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 2)

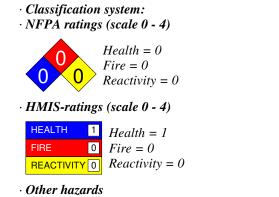
US ·

Printing date 06/14/2024

Reviewed on 06/14/2024

Trade name: Starch Solution Special Preserved with Acetic Acid

(Contd. of page 1)



· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous comp	oonents:	
CAS: 64-19-7 A	cetic Acid, Glacial	0.526%
• Table of Nonhaz	ardous Ingredients	
CAS: 7732-18-5	Water	99.279%
CAS: 9005-84-9	Starch	0.195%

4 First-aid measures

· Description of first aid measures

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.

• Information for doctor:

· Most important symptoms and effects, both acute and delayed No further relevant information available.

· Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

US

Printing date 06/14/2024

Reviewed on 06/14/2024

(Contd. of page 2)

Trade name: Starch Solution Special Preserved with Acetic Acid

· Advice for firefighters

· Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

• Environmental precautions: Dilute with plenty of water.

 \cdot Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to section 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

• PAC-1:

· FAC-I:		
CAS: 64-19-7	Acetic Acid, Glacial	5 ppm
CAS: 9005-84-9	Starch	30 mg/m ³
· PAC-2:		
CAS: 64-19-7	Acetic Acid, Glacial	35 ppm
CAS: 9005-84-9	Starch	330 mg/m ³
· PAC-3:		
CAS: 64-19-7	Acetic Acid, Glacial	250 ppm
CAS: 9005-84-9	Starch	$2,000 \text{ mg/m}^3$

7 Handling and storage

· Handling:

- Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

· Control parameters

 \cdot Components with limit values that require monitoring at the workplace:

CAS: 64-19-7 Acetic Acid, Glacial

PEL Long-term value: 25 mg/m³, 10 ppm

(Contd. on page 4)

US -

Printing date 06/14/2024

Reviewed on 06/14/2024

(Contd. of page 3)

Trade name: Starch Solution Special Preserved with Acetic Acid

REL Short-term value: 37 mg/m³, 15 ppm Long-term value: 25 mg/m³, 10 ppm

TLV Short-term value: 15 ppm Long-term value: 10 ppm

• Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:
- *Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.*
- · Breathing equipment: Not required.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation \cdot **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Goggles recommended during refilling.

· Body protection: Protective work clothing

9 Physical and chemical properties

General Information		
Appearance: Form:	Liquid	
	Liquid	
Color:	Clear to opaque	
Odor:	Odorless	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	0 °C (32 °F)	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	

US

Printing date 06/14/2024

Reviewed on 06/14/2024

Trade name: Starch Solution Special Preserved with Acetic Acid

	(Contd. of page
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
• Density at 20 °C (68 °F):	1.00092 g/cm ³ (8.35268 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wate	r): Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	0.5 %
Water:	99.3 %
VOC content:	0.53 %
	5.3 g/l / 0.04 lb/gal
Solids content:	0.2 %
• Other information	No further relevant information available.

10 Stability and reactivity

- *Reactivity* No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- · Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: (Contd. on page 6)

Printing date 06/14/2024

Reviewed on 06/14/2024

(Contd. of page 5)

Trade name: Starch Solution Special Preserved with Acetic Acid

Irritant

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

· Toxicity

- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:
- \cdot General notes: Not hazardous for water.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- *Recommendation:* Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number		
· DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name		
· DOT, ÂDN, IMDĞ, IATA	Not regulated	
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, IMDG, IATA	Not regulated	

Printing date 06/14/2024

Reviewed on 06/14/2024

		(Contd. of pag
· Environmental hazards:	Not applicable.	(Conta: of pag
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	<i>I of</i> Not applicable.	
· UN "Model Regulation":	Not regulated	
5 Regulatory information		
 Safety, health and environmental regul No further relevant information available Sara 	ations/legislation specific for the substance or e.	mixture
· Section 355 (extremely hazardous subs	ances):	
None of the ingredients is listed.		
\cdot Section 313 (Specific toxic chemical list	tings):	
None of the ingredients is listed.		
· TSCA (Toxic Substances Control Act):		
Water		ACTI
Acetic Acid, Glacial		ACTI
Starch		ACTI
· Hazardous Air Pollutants		
None of the ingredients is listed.		
· Proposition 65		
· Chemicals known to cause cancer:		
None of the ingredients is listed.		
\cdot Chemicals known to cause reproductive	toxicity for females:	
None of the ingredients is listed.		
· Chemicals known to cause reproductive	toxicity for males:	
None of the ingredients is listed.		
\cdot Chemicals known to cause development	tal toxicity:	
None of the ingredients is listed.		
· Carcinogenic categories		
· EPA (Environmental Protection Agence	y)	
None of the ingredients is listed.		
· TLV (Threshold Limit Value)		
None of the ingredients is listed.		
· NIOSH-Ca (National Institute for Occi	pational Safety and Health)	

: 8) -US

Printing date 06/14/2024

Reviewed on 06/14/2024

Trade name: Starch Solution Special Preserved with Acetic Acid

(Contd. of page 7) · Hazard pictograms GHS07 · Signal word Warning · Hazard-determining components of labeling: Acetic Acid, Glacial · Hazard statements May cause an allergic skin reaction. · Precautionary statements Wear protective gloves / eye protection. If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with local/regional/national/international regulations. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out. **16 Other information** This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. · Department issuing SDS: Environment protection department. · Contact:

Date of Preparation / Last Revision: • Date of preparation / last revision Revision 0.1, 06/14/2024: Reviewed SDS for accuracy. MH/STN 06/14/2024 / 1.0

· Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety **OSHA:** Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Sensitization - Skin 1: Skin sensitisation - Category 1 \cdot * Data compared to the previous version altered.

US -