GENERAL STORAGE CODE GREEN

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Section 1

Identification

INNOVATING SCIENCE® by Aldon 221 Rov Avon, N

"Cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

ALGINIC ACID, SODIUM SALT Product Synonyms Sodium Alginate / Sodium Polymannuronate Section 2 Hazards identification This substance or mixture has not been classified as hazardous according Supplemental information: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell. Signal word: None required Pictograms: No symbol required Target organs: None known GHS Classification: None required GHS Label information: Hazard statement: None required Precautionary statement: None required

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / information on	ingredients			
Chemical Name		CAS #	%	EINECS	
Alginic acid		9005-38-3	90-100%	232-680-1	
Section 4	First aid measures	1			

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

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

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Containers may explode when heated.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure controls / personal protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Linnes.	Alginic acid	Not established	Not established	Not established		

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9	Section 9 Physical and chemical properties						
Appearance: Solid Odor: No odor Odor threshold: D pH: Data not availa Melting / Freezing Boiling point: Data Flash point: Data n	ata not available ble point: Data not available a not available	Evaporation rate (=1): Data not available Flammability (solid/gas): Data not available Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): Data not available Solubility(ies): Soluble in water	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available Viscosity: Data not available Molecular formula: $(C_6H_7O_6Na)_n$ Molecular weight: Data not available				
Section 10	Stability and reactivity						
Chemical stability:		Hazardous polymerization: Will not occur.					

Conditions to avoid: Avoid exposure to air or moisture over long periods.

Incompatible materials: Strong oxidizers, acids and bases.

Hazardous decomposition products: Carbon oxides.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: >5000 mg/kg Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: May be harmful if inhaled. May cause irritation to mucous membranes and upper respiratory tract. Indestion: May be harmful if swallowed. Skin: Contact may cause irritation. Eyes: Contact may cause irritation. Signs and symptoms of exposure: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards. Additional information: RTECS #: AZ5820000 Section 12 Ecological information Toxicity to fish: No data available Toxicity to daphnia and other aquatic invertebrates: No data available Toxicity to algae: No data available Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Section 13 Disposal considerations These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No Exceptions: Not applicable 2020 ERG Guide # Not applicable Section 15 **Regulatory information** A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. CERLCA (RQ) DSL NDSL Component TSCA RCRA code CA Prop 65 This product does not contain Alginic acid Listed Not listed Not listed Listed Not listed any chemicals known to the State of California to cause cancer or reproductive toxicity. Section 16 Other information The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure,

Form 06/2015

ERG: Emergency Response Guidebook

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Section 1

Identification

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CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only.

Not for drug, food or household use.

Product	CALCIUM CHLORIDE, 30% SOLUTION	
Synonyms	Calcium Chloride, Aqueous Solution	
Section 2	Hazards identification	
Pictograms Target orga GHS Class Eye irritatio GHS Label	d: WARNING s: No symbol required ans: None known ification: n (Category 2B) information: Hazard statement: ses eye irritation.	Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients **Chemical Name** CAS # % EINECS 7732-18-5 70% 231-791-2 Water Calcium chloride 10043-52-4 30% 233-140-8 Section 4 First aid measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure controls / personal protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Particulates not otherwise classified	None established	TWA: 15 mg/m ³ total dust	None established	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator

Section 9	Physical and chemical pro	operties					
Odor: No odor. Odor threshold: pH: Data not avail Melting / Freezing poi	int: Approximately 0°C (32°F) (water) proximately 100°C (212°F) (water)	Flammability (Explosion lim Vapor pressur Vapor density Relative density	ate (Water = 1): <1 (solid/gas): Data not its: Lower / Upper: 1 re (mm Hg): 14 (wate (Air = 1): 0.7 (water) (Specific gravity): App : Complete in water.	Data not available r)	Auto-igniti Decompos Viscosity: Molecular	•	e: Data not available ure: Data not available. ble. re
Section 10	Stability and reactivity						
Chemical stability Conditions to avo	 y: Stable oid: Excessive temperatures whic 		ous polymerization:	Will not occur.			
ncompatible mat	erials: Avoid contact with sulfuric	acid. Flammable	e hydrogen may be ge	nerated from contact	with metals s	uch as zinc and	sodium.
lazardous decon	nposition products: None known	۱.					
Section 11	Toxicological information						
•	ral-rat LD50: 2100 mg/kg;Derm	al-rabbit LD50: >	5000 mg/kg [Calcium	chloride]			
kin corrosion/ir	ritation: Data not available						
erious eye dam:	age/irritation: Data not available						
-	in sensitization: Data not availal	ble					
	enicity: Data not available						
Carcinogenity: D	-						
	ent of this product present at levels	greater than or e	equal to 0.1% is identit	ïed as a known or ant	ticipated carci	inogen by NTP.	
	ent of this product present at level						cinogen by IARC.
	nent of this product present at leve						
Ca Prop 65: This p	product does not contain any chem	nicals known to th	e State of California to	cause cancer or rep	roductive toxi	city.	
Reproductive tox	icity: Data not available						
STOT-single expo	sure: Data not available						
U	Sule. Data not available						
• •	xposure: Data not available						
STOT-repeated ex							
STOT-repeated ex Aspiration hazard	xposure: Data not available d: Data not available						
STOT-repeated ex Aspiration hazard Potential health e	xposure: Data not available d: Data not available	spiratory tract (no	ose and throat).				
STOT-repeated ex Aspiration hazard Potential health e Inhalation: Dust m	xposure: Data not available d: Data not available offects:			irritation or ulceration	1.		
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STOT-repeated ex Aspiration hazard Potential health e Inhalation: Dust m Ingestion: Low tox Skin: Contact with Eyes: Contact with Signs and symptr Additional inform Section 12 Foxicity to fish: L Foxicity to fish: L Foxicity to daphni Foxicity to algae: Persistence and c Mobility in soil: N Other adverse effic Section 13 These disposal g regulations may I Section 14 UN/NA number Hazard class: I Exceptions: N Section 15 A chemical is conside	xposure: Data not available d: Data not available iffects: nay cause irritation to the upper restrictivity if swallowed. However, large a skin may cause irritation and/or dependence h eyes may cause severe irritation noms of exposure: See Potential hation: RTECS #: EV9810000 [C Ecological information .eepomis macrochirus (bluegill) LC3 ia and other aquatic invertebrate No data available degradability: No data available degradability: No data available degradability: No data available deta available deta available deta available be different. Dispose of in accompose	amounts may re lefatting on prolor and/or corneal in health effects ab alcium chloride] 50: 8,350-10,650 es: Daphnia mag Bioaccum PBT and vi annot be excluded disposal of cata ordance with all ping name: N ing group: N ERG Guide # the anhydrous form	sult in gastrointestinal nged contact. njury. ove. mg/L [Calcium chlorid na (water flea), LC50: ulative potential: No PvB assessment: No d in the event of unpro log-size quantities c local, state and fed Not Regulated lot applicable Not applicable is on the Inventory list.	e] 759-3,005 mg/L [Calo data available fessional handling or nly. Federal regula eral regulations or c Reportable Qua	cium chloride] disposal. tions may a contract with ntity: No	pply to empty c a licensed che M	emical disposal agency. arine pollutant: No

dent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook. Form 06/2015

GENERAL STORAGE CODE GREEN

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Section 1

Identification

[®] by Aldon INNOVATING SCIENCE

"Cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product POLYVINYL ALCOHOL, 3% SC	LUTION
Synonyms Polyvinyl Alcohol, Aqueous Solu	ion
Section 2 Hazards identification	n
This substance or mixture has not been cla to the Globally Harmonized System (GHS) or Chemicals. Signal word: Not classified Pictograms: No symbol required Target organs: None known GHS Classification: Not classified GHS Label information: Hazard statement: Precautionary statement: Not classified	f Classification and Labeling of Do not breathe mist/vapours/spray. Avoid contact with eyes. Wear protective gloves/ protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.
Hazards not otherwise classified:	

Health hazards not otherwise classified (HHNOC) - Not Known Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / information on	ingredients			
Chemical Name		CAS #	%	EINECS	
Water Polyvinyl alcohol Sodium benzoate		7732-18-5 9002-89-5 532-32-1	96% 3% 1%	231-791-2 Not listed 208-534-8	
Section 4	First aid measures				

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: In fire conditions, water may evaporate from this solution which may cause hazardous decomposition products to be formed as dust or fume.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7

Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, well-ventilated area away from incompatible substances.

Section 8	Exposure controls / personal protection				
	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits:	Polyvinyl alcohol	Not established	Not established	Not established	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical and chemical	properties				
Appearance: Liquid. Clear, thick gel.Evaporation rate (Water = 1): <1					
Section 10 Stability and reactivity					
Chemical stability: Stable Conditions to avoid: Excessive temperatures whether the stability of the stabilit	Hazardous polymerization: Will not occur. ich cause evaporation.				
Incompatible materials: Oxygen, peroxides, per	chlorates, nitrates and other oxidizers, reactive metals (sodium,	, zinc, calcium, copper, etc.)			
Hazardous decomposition products: Carbon or	kides.				
Section 11 Toxicological information	n				
Skin corrosion/irritation: Skin-rabbit - non-irritat Serious eye damage/irritation: Eyes-rabbit - slig Respiratory or skin sensitization: Data not ava Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at leve IARC classified: Group 3: Not classifiable as to its OSHA: No component of this product present at leve Ca Prop 65: This product does not contain any che Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available STOT-repeated exposure: Data not available Detential health effects: Inhalation: May cause respiratory tract irritation. S Ingestion: Essentially non-toxic. Symptoms includ Skin: Essentially non-toxic. Symptoms in Signs and symptoms of exposure: Exercise ap Additional information: RTECS #: Not available	ht irritant [Polyvinyl alcohol] lable els greater than or equal to 0.1% is identified as a known or ant carcinogenicity to humans. vels greater than or equal to 0.1% is identified as a carcinogen emicals known to the State of California to cause cancer or repr Symptoms include, nasal descharge, hoarseness, coughing, ch le inflammation of mouth, throat, esophagus and/or stomach. clude irritation or burning sensation. propriate procedures to minimize potential hazards.	or potential carcinogen by OSHA. roductive toxicity.			
Section 12 Ecological information	0 - > 40 000 100 100 0 # 05040 04 51				
Toxicity to algae: No data available	ates: Daphnia magna (Crustacea), LC50 = 8,300 ppm/48 hour	[CAS # 25213-24-5]			
Persistence and degradability: No data available Bioaccumulative potential: No data available					

Mobility in soil: No data available PBT and vPvB assessment: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 **Disposal considerations**

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport information

UN/NA number: Not applicate Hazard class: Not applicable Exceptions: Not applicable		Not applicable	Reportable Qu	antity: No	Ма	rine pollutant: No
Section 15 Regulator	y information					
A chemical is considered to be listed if	he CAS number for the anhydrous for	m is on the Inventory list.				
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Polyvinyl alcohol	Not listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the Sta of California to cause cancer or reproductive toxicity.
Section 16 Other info	rmation					

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook. Revision Date: November 1, 2022 Form 06/2015

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Section 1

Identification

INNOVATING SCIENCE® by Aldon 221 Rock Avon, N

"Cutting edge science for the classroom"

AIGON 221 Rochester Street Avon, NY 14414-9409 (585) 226-6177

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only. Not for drug, food or household use.

Product SODIUM POLYACRYLATE (S	SNOW POLYMER)
Synonyms Acrylic Acid, Polymers, Sodiu	m Salt
Section 2 Hazards identifica	tion
Signal word: WARNING Pictograms: GHS07 Target organs: None known GHS Classification: Eye irritation (Category 2B) STOT-SE (Category 3) GHS Label information: Hazard statemen H320: Causes eye irritation. H335: May cause respiratory irritation.	tr Precautionary statement: P261: Avoid breathing dust. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312: Call a POISON CENTER or doctor if you feel unwell. P337+P313: If eye irritation persists: Get medical attention. P405: Store locked up. P405: Store locked up. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known						
Section 3 Composition / information on	Composition / information on ingredients					
Chemical Name	CAS #	%	EINECS			
Sodium polyacrylate	9033-79-8	100%	None assigned			

Section 4 First aid measures

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY CAUSE RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY CAUSE IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, water spray.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Extremely slippery conditions are created if spilled product comes in contact with water.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure controls / personal protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
	8 hour exposure of 0.05 mg/m ³	None established	None established	None established	

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9 Physical and chemical pr	operties	
Appearance: Solid, white granules. Odor: No odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: >330°C (>626°F) Boiling point: Data not available Flash point: Data not available	Evaporation rate (=1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available Relative density (Specific gravity): 0.62 - 0.74 g/ml Solubility(ies): Swells in water.	Partition coefficient: Data not available Auto-ignition temperature: >400°C (752°F) Decomposition temperature: >200°C Viscosity: Data not available. Molecular formula: Data not available Molecular weight: Data not available
Section 10 Stability and reactivity		

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Protect from moisture. Avoid heat and sources of ignition.

Incompatible materials: None known. Product swells in water

Hazardous decomposition products: None known.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: >2000 mg/kg Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity. Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: Inhalation: Exposure to respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions. Ingestion: Tests have shown that polyacrylate absorbents are non-toxic if ingested. However, as in any instance of non-food consumption, seek medical attention in the event of any adverse symptoms. Skin: Prolonged exposure, such as in manufacturing, may aggravate existing skin conditions due to drying effect. Eyes: Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes Signs and symptoms of exposure: See Potential health effects above. Additional information: RTECS #: None assigned Section 12 **Ecological information** Toxicity to fish: No data available Toxicity to daphnia and other aquatic invertebrates: No data available Toxicity to algae: No data available Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal Section 13 Disposal considerations These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No 2020 ERG Guide # Not applicable Exceptions: Not applicable Section 15 **Regulatory information** A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. CERLCA (RQ) DSL NDSL Component TSCA RCRA code CA Prop 65 This product does not contain Sodium polyacrylate Listed Not listed Not listed Listed Not listed any chemicals known to the State of California to cause cancer or reproductive toxicity. Section 16 Other information The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure,

ERG: Emergency Response Guidebook

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Section 1

Identification

INNOVATING SCIENCE

"Cutting edge science for the classroom"

By Aldon 221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory and industrial use only.

Not for drug, food or household use.

Product	CITRIC ACID, MONOHYDRATE	
Synonyms	2-Hydroxy-1,2,3-Propane Tricarboxylic Acid	
Section 2	Hazards identification	
Pictograms	d: WARNING s: GHS07 ans: None known	Precautionary statement(s): P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.
GHS Classi	ification:	

Eye irritation (Category 2)

GHS Label information: Hazard statement(s): H319: Causes serious eye irritation.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients				
Chemical Name	CAS #	%	EINECS	
Citric acid, monohydrate	5949-29-1	100%	201-069-1 (anhydrous)	
-			,	
Section 4 First aid measures				

INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5

Suitable Extinguishing Media: Use any media suitable for extinguishing supporting fire

Fire fighting measures

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Section 6 Accidental release measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Section 7 Handling and storage

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale dusts. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash clothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Minimize dust generation.

Section 8	Exposure controls / personal protection			
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Citric acid	Not listed	Not listed	Not listed

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: Exceptions: Not applicable 2020 ERG Guide # Not applicable Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prop					
Odor: No odor. Odor: No odor. Attachage of the second					
Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperature and heat. Avoid dust formation. Incompatible metarials: Stong dust dust dust dust dust dust dust dust	railable				
Conditions to avoid: Excessive temperature and heat. Avoid duat formation. Incompatible materials: Strong bases and oxidizing materials. Hazardous decomposition products: Carbon oxides. Section 11 Toxicological information Acute toxicity: Oral-rat LDSO: 12,000 mg/kg (arhydrous) Skin corrosion/irritation: Data not available Gorn cell mutagenity: Data not available Carcinogenity: Data not available STOT-single exposure: Data n					
Hazardous decomposition products: Carbon oxides. Section 11 Toxicological information Acute toxicity: Oral-rat LD50: 12,000 mg/kg (anhydrous) Skin corresion/irritation: Data not available Germ cell mutagenicity: Data not available Care: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or portential carcinogen by IARC. OSH4: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or portential carcinogen by IARC. OSH4: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or portential carcinogen by OSHA. Car Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity Reporductive control Data not available STOT-single exposure: Data not available Detection STOT-single exposure: Data not available Detection Stin: Contact with eyes may cause inflation with redness, pain, possible eye burns, conjunctivitis, ulceration and permanent cloudiness. Signs and symptoms of exposure: Long term over-exposure may cause damage to toxin the available Detection of MIT damage					
Section 11 Toxicological information Acute toxicity: Oral-rat LDS0: 12.000 mg/kg (anhydrous) Skin corrosion/irritation: Data not available Serious eye damagdirritation: Rabbit-highly irritating Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available Carcinogenity: Data not available ARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Pro 65: This product Segment at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Pro 65: This product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Pro 65: This product Derson of valiable STOT-single exposure: Data not available STOT-single exposure: Data not available STOT-single exposure: Data mot available Stin: Contact with eyes may cause acute gastrointestinal irritation with addominal pain. Skin: Contact with eyes may cause acute gastrointestinal inflation with redness, pain, possible eye burs, conjunctivitis, ulceration and permanent cloudiness. Signs and symptoms of exposure: Long term way cause damage to toxin enamel. Additional i					
Acute toxicity: Oral-rat LD50: 12,000 mg/kg (anhydrous) Skin corresion/initiation: Data not available Serious eye damage/initiation: Data not available Carcinogenity: Data not available Carcinogenity: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-single acuse initation to mucous membranes causing sore throat, coughing and shortness of breath. Ingestion: Ingestion may cause acute gastrointestinal irritation with abdominal pain. Skin: Contart may cause irritation. Eves: Contart with eyes may cause acute gastrointestinal irritation with abdominal pain. Skin: Contart may cause acute gastrointestinal irritation with abdominal pain. Skin: Contart may cause acute gastrointestinal irritation with redness, pain, possible eye burns, conjunctivitis,					
Skin corrosion/irritation: Data not available Serious eye damage/irritation: Rabbit-highly irritating Respiratory or skin sensitization: Data not available Carcinogenity: Data not available NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a norw or anticipated carcinogen by NTP. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-single store and available Potential healtin may cause irritation Honalation: Inhalation may cause irritation Inselstor may cause irritation. Eyes: Contact with eyes may cause irritation with redness, pain, possible eye burns, conjunctivitis, ulceration and permanent cloudiness. Signs and symptoms of exposure: Long term over-exposure may cause damage to tooth enamel. Additional Information: Toxicity to fish: Leponis macrochius (Fish, Fresh water) LCS0: 1.516 mg/l%6 hours (anhydrous) Toxicity to fish: Leponis macrochius (Hish, Fresh water) LCS0: 1.516 mg/l%6 hours (anhydrous) Persistence and degrability: No data available PBT and VPVB assessment: No data available <tr< td=""><td></td></tr<>					
Toxicity to fish: Lepomis macrochirus (Fish, Fresh water) LC50: 1,516 mg/l/96 hours (anhydrous) Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: ca. 120 mg/l/72 hours (anhydrous) Toxicity to algae: Scenedesmus quadricauda (Algae) EC3: 640 mg/l/7 days (anhydrous) Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Section 13 Disposal considerations These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and federal regulations or contract with a licensed chemical disposal ag Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Shipping name: Not applicable Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. Marine pollutant: Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prog	RC.				
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: ca. 120 mg/l/72 hours (anhydrous) Toxicity to algae: Scenedesmus quadricauda (Algae) EC3: 640 mg/l/7 days (anhydrous) Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available PBT and vPvB assessment: No data available Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Section 13 Disposal considerations These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State ar regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal ag Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: Exceptions: Not applicable 2020 ERG Guide # Not applicable Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prog					
These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal ages of the contract disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and federal regulations or contract with a licensed chemical disposal ages of the contract disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and federal regulations or contract with a licensed chemical disposal ages of the contract disposal ages of the contract disposal ages of the contract disposal disposal ages of the catalog of the catalog of the catalog of the catalog. Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Exceptions: Not applicable 2020 ERG Guide # Not applicable Reportable Quantity: No Marine pollutant: Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. NDSL CA Properties Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Properties					
regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal ag Section 14 Transport information UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Exceptions: Not applicable 2020 ERG Guide # Not applicable Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prop	tata and/ar lass!				
UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Exceptions: Not applicable 2020 ERG Guide # Not applicable Reportable Quantity: No Marine pollutant: Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prop	regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.				
Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: Exceptions: Not applicable 2020 ERG Guide # Not applicable Reportable Quantity: No Marine pollutant: Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. RCRA code DSL NDSL CA Prop					
A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list. Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prop	ant: No				
Component TSCA CERLCA (RQ) RCRA code DSL NDSL CA Prop					
	A Prop 65				
Citric acid, anhydrous Listed Not listed Not listed Not listed Not listed Not listed Not listed This product does not any chemicals know of California to cause reproductive toxicity.	does not contain Is known to the State to cause cancer or				

Section 16 Other information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook. Form 06/2015