GENERAL STORAGE CODE GREEN

Page E1 of E2

Section 1

Product

Identification

CITRIC ACID, ANHYDROUS

"Cutting edge science for the classroom" by Aldon "State of the classroom" State of the classroom (State of the classroom) (State of the classroom

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

Not for drug, food or household use.

Synonyms 2-Hydroxy-1,2,3-Propane Tricarboxylic Acid	
Section 2 Hazards identification	
Signal word: WARNING Pictograms: GHS07 Target organs: None known GHS Classification: Eye irritation (Category 2A) GHS Label information: Hazard statement(s): H319: Causes serious eye irritation.	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 advice/attention.

Hazards not otherwise classified:

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

Section 3 C	Composition / information on ingredients						
Chemical Name		CAS #	%	EINECS			
Citric acid, anhydrous		77-92-9	100%	201-069-1			
Section 4 Fi	irst 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 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: 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.

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.

approved respirato									
Section 9	Physical and chemica					-			
Ddor: No odor. Ddor threshold: 1 DH: 2.2 in 0.1N aq	point: 153°C (307°F) Ita not available	Flammability (Explosion limi Vapor pressur Vapor density Relative densit	Flammability (solid/gas): Not applicable Au Explosion limits: Lower / Upper: Not applicable De Vapor pressure (mm Hg): Data not available Vis Vapor density (Air = 1): Data not available Med		Auto-ignitie Decompos Viscosity: Molecular f		: 1010°C (1850°F) re: >170°C (338°F)		
Section 10	Stability and reactivity	/							
Chemical stability	-		ous polymerization: \	Will not occur.					
	oid: Excessive temperature a		ormation.						
-	terials: Strong bases and oxi	-							
	nposition products: Carbor	Oxides.							
Section 11	Toxicological informa	tion							
-	Dral-rat LD50: 12,000 mg/kg								
	ritation: Data not available age/irritation: Rabbit-highly	irritating							
-	kin sensitization: Data not a	-							
	enicity: Data not available								
Carcinogenity: D									
	ent of this product present at le nent of this product present at						inogen by IARC		
	nent of this product present at	0		1 /1			0,		
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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.

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.

SODIUM CARBONATE, ANHYDROUS Product

Synonyms Soda Ash Section 2

Hazards identification

Signal word: WARNING Pictograms: GHS07 Target organs: None known.



GHS Classification: Eye irrit. (Category 2A)

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

Precautionary statement:

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.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Compose	Composition / information on ingredients						
Chemical Name	CAS #	%	EINECS				
Sodium carbonate	497-19-8	100%	207-838-8				
Section 4 First aid	I 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: 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

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

General information: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Sodium carbonate reacts with hydrated lime to form caustic soda. Special care should be taken where lime and sodium carbonate are handled in the same area.

Section 6 Accidental release measures

Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. 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. Avoid runoff into storm sewers and ditches which lead to waterways.

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

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. Keep out of reach of children. Use with adequate ventilation. Wash thoroughly after handling

Handling: Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts. Wash thoroughly after handling. Remove and wash clothing before reuse.

Section 8 Exposure controls / personal protection **Chemical Name** ACGIH (TLV) OSHA (PEL) NIOSH (REL) Exposure Limits: Sodium carbonate 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. Physical and chemical properties Section 9 Appearance: Solid, white powder. Evaporation rate (= 1): Data not available Partition coefficient: Data not available Odor: No odor. Flammability (solid/gas): Data not available. Auto-ignition temperature: Data not available Odor threshold: Data not available. Explosion limits: Lower / Upper: Not flammable Decomposition temperature: 1000°C (1832°F) Vapor pressure (mm Hg): Data not available pH: Data not available Viscosity: Data not available. Molecular formula: Na₂CO₃ Melting / Freezing point: 864°C (1587°F) Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.533 Boiling point: Decomposes Molecular weight: 105.99 Flash point: Not flammable Solubility(ies): 17% @ 20°C in water Section 10 Stability and reactivity Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures. Hygroscopic material, avoid moisture. Incompatibilities with other materials: Acids cause decompostion liberating gaseous carbon dioxide. When mixed with lime dust and water, corrosive and caustic soda may be produced. Hazardous decomposition products: Carbon dioxide. Section 11 **Toxicological information** Acute toxicity: Oral-rat LD50: 4090 mg/kg ; Inhalation-rat LC50: 2.3 mg/l/2 hours ; Dermal-rat LD50: 2210 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. Causes respiratory tract irritation. Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed. Skin: May be harmful if absorbed through skin. Causes skin irritation. Eves: Causes eve irritation. Signs and symptoms of exposure: Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting Additional information: RTECS #: VZ4050000 Section 12 **Ecological information** Toxicity to fish: LC50 - Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 265 mg/l - 48 h 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. DSL NDSL RCRA code CA Prop 65 Component TSCA CERLCA (RQ) This product does not contain Sodium carbonate Listed Not listed Not listed Not 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

GENERAL STORAGE CODE GREEN

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Section 1

Identification

INNOVATING SCIENCE[®] by Aldon 221 Roc 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.

Product	SODIUM BICARBONATE, ANHYDROUS	
Synonyms	Baking Soda / Sodium Hydrogen Carbonate / Carbonic Acid Sodium (1:1)	
Section 2	Hazards identification	
to the Globa Chemicals. Signal word Pictograms	nce or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of I: Not classified : Not classified ns: None known	Precautionary statement(s): Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.
GHS Classi	fication: Not classified	
GHS Label i	nformation: Hazard statement(s): Not classified	

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	
Sodium bicarbonate		144-55-8	100%	205-633-8	
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: 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: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material is commonly used to extinguish fires.

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.

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. Store away from acids.

Section 8	Exposure controls / personal protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Linits.	Sodium bicarbonate	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	
Odor: No odor. Odor threshold: Data pH: 8.2 (1% solution)	int: 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): Negligible Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.16 @ 20°C Solubility(ies): 8.6 g/100 ml water at 20°C	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available Viscosity: Data not available. Molecular formula: NaHCO ₃ Molecular weight: 84.01
Section 10	Stability and reactivity		
Observised stability (Dt-hl-	Hennedaus a charactication. M/ill a starson	

Chemical stability: Stable

ERG: Emergency Response Guidebook.

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Hazardous polymerization: Will not occur.

Conditions to avoid: High temperature causes decomposition to sodium carbonate, water and carbon dioxide.

Incompatible materials: Reacts with acids to yield acid salts, water and carbon dioxide.

Hazardous decomposition products: Gaseous carbon dioxide.

Section 11 Toxicological information

Section II	Toxicological into	mation						
•	-rat LD50: 4220-4400	0 0						
	tion: Skin-rabbit - not	0	_					
	e/irritation: Eye-rabbi		ig					
	sensitization: Non se city: Data not availab	0						
Carcinogenity: Data	•							
	of this product present	at levels are	ater than or e	equal to 0.1% is identi	fied as a known or a	nticipated carci	nogen by NTP	
	t of this product preser							cinogen 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 toxici	ty: Data not available							
0 1	ire: Data not available							
	osure: Data not availa	ıble						
Aspiration hazard:								
Potential health effe		·						
	e dust may irritate resp		noo if ingooto	d				
Skin: No hazard kno	may cause gastrointes	แกล นเรเนเมล	nce il ingeste	u.				
	eyes may cause very sl	ight irritation						
	is of exposure: See I			ove.				
	ion: RTECS #: VZ09							
Section 12	Ecological information	ation						
Toxicity to daphnia Toxicity to algae: Ni Persistence and deg Mobility in soil: No	mbusia affinis (fish, fre: and other aquatic inv tcheria linearis (Algae) gradability: No data a data available ts: An environmental l	ertebrates: LC50: 650 n vailable	Daphnia mag ng/l/5 day Bioaccumu PBT and vi	na (Crustacea) EC50 ulative potential: No PvB assessment: N	o data available o data available			
Section 13	Disposal consider	ations						
	delines are intended	for the disp						container. State and/or local emical disposal agency.
Section 14	Transport informa	ation						
UN/NA number:	Not applicable	Shippin	name : N	lot Regulated				
Hazard class: No	t applicable			ot applicable	Reportable Qu	antity: No	Ма	arine pollutant: No
Exceptions: Not	••	•	• •	Not applicable				•
Section 15	Regulatory inform	ation						
	to be listed if the CAS nu		nhvdrous form	is on the Inventory list.				
Compone			TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Sodium bicarbonate			Listed	Not listed	Not listed	Listed	Not listed	This product does not contain
			Listou	Not listed	Nothisted	Listed	Nothisted	any chemicals known to the State of California to cause cancer or reproductive toxicity.
Section 16	Other information							•
dent determinations of s	uitability and completenes ncy for Research on Cano	ss of information	on from all sour	ces to assure proper use	e of these materials and	d the safety and h	ealth of employee	ered by them and must make indepen- s. NTP: National Toxicology Program, osure, RE: Repeated Exposure,

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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, ANHYDROUS	
Synonyms	N/A	
Section 2	Hazards identification	
Pictograms Target orgs GHS Class Acute toxici Eye irritatio Skin irritatio GHS Label H302: Harn H315: Caus	ans: None known	Precautionary statement: P264: Wash hands thoroughly after handling. P270: Do not eat, drink or smoke when using this product. P280: Wear protective gloves/protective clothing/eye protection/face protection P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell P302+P352: IF ON SKIN: Wash with plenty of water and soap. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330: Rinse mouth. P332+P313: If skin irritation occurs: Get medical attention. P332+P313: If get irritation persists: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. 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	ingredients			
Chemical Name		CAS #	%	EINECS	
Calcium chloride		10043-52-4	>93.0%	233-140-8	
Potassium chloride		7447-40-7	< 3%	231-211-8	
Sodium chloride		7647-14-5	< 2%	231-598-3	
Calcium bromide		7789-41-5	< 1%	232-164-6	
Water		7732-18-5	< 1%	231-791-2	

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 SERIOUS 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. Heat is generated when product mixes 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.

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: Hygroscopic material. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8	Exposure controls / personal protection					
Exposure Limite:	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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAnirator woodr

approved respirator.		-	-	-				
Section 9 Phys	sical and chemical prope	erties						
Appearance: Solid. White Odor: No odor. Odor threshold: Data not a pH: Data not available. Melting / Freezing point: 7 Boiling point: Data not ava Flash point: Not applicable	pellets. Ex vailable. Ex 72°C (1422°F) Va ilable Re	vaporation rate ammability (sol xplosion limits: apor pressure (i apor density (Ai	(= 1): Not applic id/gas): Data not i Lower / Upper: N mm Hg): Negligibl r = 1): Data not av ecific gravity): Data oluble in water.	available. lot applicable e ailable	Auto-ignitio Decomposi Viscosity: I Molecular fe		re: Data not available.	
Section 10 Stab	ility and reactivity							
Chemical stability: Stable Conditions to avoid: Hygro Incompatible materials: H gen may be generated from Hazardous decomposition	eat is generated when mixed contact with metals such as	sture. d with water. Sp			ontact with sulfu	rric acid. Corros	ive when wet. Flammable h	ydro-
Section 11 Toxic	cological information							
Skin corrosion/irritation: I Serious eye damage/irritat Respiratory or skin sensiti Germ cell mutagenicity: D Carcinogenity: Data not av NTP: No component of this IARC: No component of this OSHA: No component of this OSHA: No component of thi Ca Prop 65: This product do Reproductive toxicity: Da STOT-single exposure: Da STOT-repeated exposure: Da STOT-repeated exposure: Aspiration hazard: Data no Potential health effects: Inhalation: Dust may cause Ingestion: Low toxicity if sw Skin: Contact with skin may Eyes: Contact with eyes ma Signs and symptoms of ex Additional information: R	tion: Data not available ization: Data not available vailable product present at levels gre product present at levels gre s product present at levels g es not contain any chemical ta not available Data not available ot available irritation to the upper respira allowed. However, large am r cause irritation and/or defar ay cause severe irritation and/or defar	eater than or eq greater than or eq ls known to the S atory tract (nose iounts may resul tting on prolonge d/or corneal injur	ual to 0.1% is ident qual to 0.1% is iden State of California to and throat). t in gastrointestinal ed contact. y.	ified as probable, pos tified as a carcinoger o cause cancer or rep	ssible or confirr n or potential ca productive toxic	ned human carc arcinogen by OS		
Section 12 Ecol	ogical information							
These disposal guidelines regulations may be differe	her aquatic invertebrates: available ility: No data available vailable environmental hazard canno osal considerations is are intended for the disp ent. Dispose of in accord	Daphnia magna Bioaccumula PBT and vPvl ot be excluded in posal of catalog	(water flea), LC50: tive potential: No B assessment: No the event of unpro g-size quantities c	data available o data available fessional handling or only. Federal regula	ations may ap		ontainer. State and/or loc mical disposal agency.	cal
Section 14 Tran	sport information							
UN/NA number: Not ap Hazard class: Not appli Exceptions: Not applic	icable Packing able 2020 EF	g name: Not g group: Not RG Guide # N	applicable	Reportable Qua	antity: No	Ma	arine pollutant: No	
U U	ulatory information							
A chemical is considered to be li	sted if the CAS number for the a	•	•	PCPA code	DSL	NDEL	CA Bron 65	
Component Calcium chloride		TSCA Listed	CERLCA (RQ) Not listed	RCRA code Not listed	Listed	NDSL Not listed	CA Prop 65 This product does not contain any chemicals known to the St of California to cause cancer of reproductive toxicity.	
Section 16 Othe	er information							
The information contained herein dent determinations of suitability							ered by them and must make ind . NTP: National Toxicology Proc	

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

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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.

UNIVERSAL PH INDICATOR Product Synonyms Universal Indicator Section 2 Hazards identification Signal word: DANGER Precautionary statement: Pictograms: GHS02 / GHS08 / GHS06 P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. Target organs: Eyes, Central nervous system, Liver, Kidneys. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P260: Do not breathe mist/vapours/spray. P264: Wash hands thoroughly after handling. GHS Classification: P271: Use only outdoors or in a well-ventilated area. Flammable liquid (Category 2) P280: Wear protective gloves/protective clothing/eye protection/face protection. Acute toxicity, inhalation (Category 3) P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove Skin irritation (Category 2) contact lenses, if present and easy to do. Continue rinsing Eye irritation (Category 2B) P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated STOT-SE (Category 2) clothing. Rinse skin with water/shower. STOT-SE (Category 3) P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing GHS Label information: Hazard statement: P312: Call a POISON CENTER or doctor if you feel unwell. H225: Highly flammable liquid and vapour. P332+P313: If skin irritation occurs: Get medical attention. H315: Causes skin irritation. P337+P313: If eye irritation persists: Get medical attention. H319: Causes serious eye irritation. P362+P364: Take off contaminated clothing and wash it before reuse. H331: Toxic if inhaled. P403+P233: Store in a well-ventilated place. Keep container tightly closed. H336: May cause drowsiness or dizziness. P501: Dispose of contents/container to a licensed chemical disposal agency in H371: May cause damage to organs. 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 ingredients					
Chemical Name		CAS #	%	EINECS		
Ethyl alcohol		64-17-5	64.50 - 65.11%	200-578-6		
Water		7732-18-5	23.96%	231-791-2		
Isopropyl alcohol		67-63-0	6.83%	200-661-7		
Methanol		67-56-1	3.03 - 3.26%	200-659-6		
Methyl isobutyl keto	ne	108-10-1	0.68 - 0.76%	203-550-1		
Bromothymol blue		76-59-5	0.06%	200-971-2		
Phenolphthalein		77-09-8	0.06%	201-004-7		
Methyl red		845-10-3	0.02%	212-682-9		
Thymol blue		62625-21-2	0.005%	263-650-6		

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: MAY BE HARMFUL IF INHALED. CAUSES 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 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. CAUSES 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: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

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: Remove all sources of ignition. 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.

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, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 8	Exposure controls / personal protection					
Exposure Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits:	Ethanol	STEL: 1000 ppm / 1880 mg/m ³ (A3)	TWA: 1000 ppm / 1900 mg/m ³	TWA: 1000 ppm / 1900 mg/m ³		

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.

approved respirator.									
Section 9	Physical and chemical pro	operties							
Appearance: Clear, Odor: Mild character Odor threshold: Dat pH: Data not availabl	green liquid. istic odor. a not available. e. pint: -114°C (-173°F)* °C (173-174°F)*	Evaporation rate Flammability (so Explosion limits Vapor pressure (Vapor density (A	(Specific gravity):	available. 4.0%(V) / 20.0%(V)* 0°C (68°F)*	Auto-ignitie Decompos Viscosity: Molecular	oefficient: Data n on temperature: ition temperature Data not available formula: Mixture weight: Mixture	400°C (752°F)* e: Data not available. e.		
Section 10	Stability and reactivity								
Conditions to avoid Incompatible materi	Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition. Incompatible materials: Strong oxidizers, inorganic acids and halogens. Hazardous decomposition products: Oxides of carbon.								
Section 11	Section 11 Toxicological information								
Skin corrosion/irrita Serious eye damage Respiratory or skin Germ cell mutageni Carcinogenity: Data NTP: No component IARC classified: Grou OSHA: No componer CA Prop 65: A WAR and birth defects or o Reproductive toxici STOT-single exposu STOT-repeated expo Aspiration hazard: Potential health effe Inhalation: Inhalation Ingestion: Ingestion Skin: Contact with sk Eyes: Contact with es	of this product present at levels up 3: Not classifiable as to its ca t of this product present at level NING! :This product can expose ther reproductive harm. ty: Data not available ure: The substance or mixture i psure: Data not available Data not available	t. re irritant. ole greater than or equinoingenicity to hur ls greater than or equinoingent to hur ls greater than or et a you to Phenolphth s classified as spect ess, nausea, vomiti decreased reaction, prolonged contact.	ual to 0.1% is identif nans. [Isopropanol] qual to 0.1% is iden nalein, Methanol and cific target organ tox ng, inability to conce euphoria, nausea,	ied as a known or an tified as a carcinoger d Methyl isobutyl keto icant, single exposur entrate and irritation o	n or potential one, which are e, category 3 n of the throat.	carcinogen by OSł known to the Stat with narcotic effec	te of California to cause cancer		
Section 12	Ecological information								
Toxicity to daphnia a Toxicity to algae: Ch Persistence and deg Mobility in soil: No Other adverse effect Section 13	corhynchus mykiss (fish, fresh v and other aquatic invertebrate lorella pyrenoidosa (Algae), EC gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the o	es: Daphnia magna 50 = 9,310 mg/l/gr Bioaccumula PBT and vPv Innot be excluded i	a (Crustacia), EC50 owth rate [Ethanol, a ative potential: No B assessment: No n the event of unpro	= 10,800 mg/l/24 hou absolute] data available o data available fessional handling or	disposal.		intainer. State and/or local		
	different. Dispose of in acco								
Section 14	Transport information								
Hazard class: 3 Exceptions: Limi	UN/NA number: UN1170 Shipping name: Ethanol solution								
Section 15	Regulatory information								
	to be listed if the CAS number for t				Dei	NDO			
Compone Ethanol Methanol Isopropanol	m	TSCA Listed Listed Listed	CERLCA (RQ) Not listed 5,000 lbs. Not listed	RCRA code D001 U154 Not listed	DSL Listed Listed Listed	NDSL Not listed Not listed Not listed	CA Prop 65 WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.		
Section 16	Other information								
							red by them and must make indepen- NTP: National Toxicology Program.		

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

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Section 1

Identification

"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.

Synonyms Dishwashing Llquid, Green Section 2 Hazards identification Signal word: WARNING Pictograms: None required. Target organs: None known. Precautionary statement(s): P210: Keep away from heat/sparks/open flames/hot surfaces P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protecti P305+P351+P338: IF IN EYES: Rinse cautiously with water contact lenses, if present and easy to do. Continue rinsing. Acute toxicity (Category 5) Eye irritation (Category 2B) P312: Call a POISON CENTER or doctor if you feel unwell. P337+P313: If eye irritation persists: Get medical attention. P370+P378: In case of fire: Use dry chemical, alcohol foam, spray to extinguish. P403+P235: Store in a well-ventilated place. Keep cool.	
Signal word: WARNING Precautionary statement(s): Pictograms: None required. P210: Keep away from heat/sparks/open flames/hot surfaces Target organs: None known. P264: Wash hands thoroughly after handling. GHS Classification: P305+P351+P338: IF IN EYES: Rinse cautiously with water Combustible liquid (Category 4) contact lenses, if present and easy to do. Continue rinsing. Acute toxicity (Category 5) P312: Call a POISON CENTER or doctor if you feel unwell. Eye irritation (Category 2B) P337+P313: If eye irritation persists: Get medical attention. BHS Label information: Hazard statement(s): H227: Combustible liquid	
Pictograms: None required. P210: Keep away from heat/sparks/open flames/hot surfaces Target organs: None known. P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protecti P305+P351+P338: IF IN EYES: Rinse cautiously with water Combustible liquid (Category 4) contact lenses, if present and easy to do. Continue rinsing. Acute toxicity (Category 5) P312: Call a POISON CENTER or doctor if you feel unwell. Eye irritation (Category 2B) P370+P378: In case of fire: Use dry chemical, alcohol foam, BHS Label information: Hazard statement(s): P403+P235: Store in a well-ventilated place. Keep cool.	vallat aurfaces. No amolina
GHS Classification: P305+P351+P338: IF IN EYES: Rinse cautiously with water Combustible liquid (Category 4) contact lenses, if present and easy to do. Continue rinsing. Acute toxicity (Category 5) P312: Call a POISON CENTER or doctor if you feel unwell. Eye irritation (Category 2B) P370+P313: If eye irritation persists: Get medical attention. GHS Label information: Hazard statement(s): P372: Combustible liquid	0
P403+P235: Štore in a well-ventilated place. Keep cool.	sly with water for 15 minutes. Remove tinue rinsing. u feel unwell. cal attention.
H303: May be harmful if swallowed. H320: Causes eye irritation. H320: Causes eye irritation. H320: Causes eye irritation.	sed chemical disposal agency in

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			
Proprietary anionic surfactants Sodium dodecylbenzene sulfonate Ethyl alcohol	Not available 25155-30-0 64-17-5	89.5 - 93.5% 5.5% 1-5%	Not available 246-680-4 200-578-6			
Section 4 First aid measures						

NOCETION: MAY DE LIADMELIL DY INCECTION Colling to Deitors Control

INGESTION: MAY BE HARMFUL BY 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: 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: There are no unusual fire and explosion hazards associated with the solution.

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. Spill area may be slippery. Flush with plenty of water.

ERG: Emergency Response Guidebook.

Form 06/2015

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.

Section 8	Exposure controls / personal protection					
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits:	Not listed	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.							
Section 9	Physical and chemical p	roperties					
Appearance: Greet Odor: Mild, floral oc Odor threshold: No pH: 6.5 - 7.3 Melting / Freezing p Boiling point: Not Flash point: 62°C (lor. ot available ooint: Not available available	Flammability Explosion lin Vapor pressu Vapor density	rate (=1): Not avail (solid/gas): N/A nits: Upper: N/A Lo ire (mm Hg): Not avail y (Air = 1): Not avail sity (Specific gravity): Complete.	ower: N/A ailable able	Auto-ign Decomp Viscosity Molecula	ition temperatu	ture.
Section 10	Stability and reactivity						
Incompatible mater	Stable d: Excessive temperatures. rials: Chlorine bleach. position products: None know		us polymerization:	Will not occur.			
Section 11	Toxicological informatio	n					
Skin corrosion/irrit Serious eye damag Respiratory or skin Germ cell mutagen Carcinogenity: Dal NTP: No component IARC: No component OSHA: No componer Ca Prop 65: This pro Reproductive toxic STOT-single expos STOT-repeated exp Aspiration hazard: Potential health eff Inhalation: No adver Ingestion: May be h Skin: May cause irrit Eyes: Causes irritat Signs and symptor not available. Exerc	of this product present at leve t of this product present at leve nt of this product present at leve oduct does not contain any che ity: Data not available ure: Data not available osure: Data not available Data not available ects: rse effects expected. armful if swallowed in large an tation on prolonged or repeate ion of direct contact, but no pe	e able Is greater than or e els greater than or vels greater than or micals known to the nounts. d contact. rmanent injury is ex of our knowledge th minimize potential f	qual to 0.1% is identi equal to 0.1% is ident equal to 0.1% is iden e State of California to state of California to e chemical, physical a	ified as probable, po titified as a carcinoge o cause cancer or re	ossible or confirn en or potential c productive toxic	med human carc arcinogen by OS bity.	
Section 12	Ecological information						
Toxicity to fish: No Toxicity to daphnia Toxicity to algae: N Persistence and de Mobility in soil: No Other adverse effect Section 13	data available and other aquatic invertebra o data available gradability: No data available data available tts: An environmental hazard Disposal considerations	e Bioaccumu PBT and vF cannot be excluded	Ilative potential: No PvB assessment: No I in the event of unpro	o data available ofessional handling c		pply to empty c	container. State and/or local
regulations may be	e different. Dispose of in ac	cordance with all	local, state and fed	eral regulations or	contract with	a licensed che	emical disposal agency.
Section 14	Transport information						
UN/NA number: Hazard class: No Exceptions: No	ot applicable Pac	pping name: N king group: No 0 ERG Guide #	ot applicable	Reportable	Quantity: N	o Ma	rine pollutant: No
Section 15	Regulatory information						
	d to be listed if the CAS number fo	•			DOL	NDO	
Compone Sodium dodecylbenz Ethanol		Listed Listed	CERLCA (RQ) 1,000 lbs Not listed	RCRA code Not listed D001	DSL Listed Listed	NDSL Not listed Not listed	CA Prop 65 This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Section 16	Other information						
The information contain	ed herein is furnished without war						ered by them and must make indepense. 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,

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 BROMOTHYMOL BLUE, 0.04% AQUEOUS SOLUTION	
Synonyms Bromothymol Blue, Water Solution	
Section 2 Hazards identification	
This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals. Signal word: Not classified Pictograms: Not classified Target organs: None known	Supplementary information: Do not breathe vapors, spray or mist. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.
GHS Classification: Not classified GHS Label information: Hazard statement: Not classified Precautionary statement: Not classified	
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 Bromothymol blue, sodi	um salt	7732-18-5 34722-90-2	99.96% 0.04%	231-791-2 252-169-7		
Section 4 F	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: 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 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 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.

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. Protect from light.

Section 8	Exposure controls / personal protection						
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Bromothymol blue	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirate							
Section 9	Physical and chem				D. ditt		
Odor: No odor. Odor threshold: pH: Data not ava Melting / Freezing po	oint: Approximately 0°C (32°F) (pproximately 100°C (212°F) (v	Water) Relative density Flammability Explosion lim Vapor pressu Vapor density Relative density	ate (Water = 1): <1 (solid/gas): Data not hits: Lower / Upper: re (mm Hg): 14 (water / (Air = 1): 0.7 (water) / (Specific gravity): App): Complete in water.	Data not available er))	Auto-igniti Decompos Viscosity: Molecular	•	e: Data not available ure: Data not available. ble. re
Section 10	Stability and react	ivity					
Chemical stabilit	ty: Stable oid: Excessive temperatu		ous polymerization: ition. Protect from ligh				
	terials: Strong oxidizers.		0				
Hazardous decor	mposition products: Car	bon oxides, sulfur oxides	and bromine gas.				
Section 11	Toxicological infor	rmation					
Germ cell mutag Carcinogenity: E NTP: No compone IARC: No compon OSHA: No compo Ca Prop 65: This I Reproductive too STOT-single exp	kin sensitization: Data no genicity: Data not available Data not available ent of this product present nent of this product presen product does not contain a xicity: Data not available oosure: Data not available	e at levels greater than or t at levels greater than or nt at levels greater than o any chemicals known to th	equal to 0.1% is ident or equal to 0.1% is iden	ified as probable, pos ntified as a carcinoge	sible or confir or potential c	med human care arcinogen by OS	0,
Aspiration hazar Potential health of Inhalation: May be Ingestion: May be Skin: May cause Eyes: May cause Signs and sympt	exposure: Data not availa rd: Data not available effects: pe harmful if inhaled. e harmful if swallowed. irritation. e irritation.	ble e best of our knowledge,		and toxicological pro	perties have n	ot been thoroug	hly investigated. Specific dat
Aspiration hazar Potential health of Inhalation: May be Skin: May cause Eyes: May cause Signs and sympt not available. Exe Additional inform	exposure: Data not availa rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. irritation. b irritation. toms of exposure: To the ercise appropriate procedu nation: RTECS #: Data n	ble e best of our knowledge, ures to minimize potential not available		and toxicological pro	perties have n	ot been thoroug	hly investigated. Specific dat
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Aspiration hazar Potential health of Inhalation: May be Skin: May cause Eyes: May cause Signs and sympt not available. Exe Additional inform Section 12 Toxicity to fish: I Toxicity to fish: I Toxicity to algae: Persistence and of Mobility in soil: I Dther adverse eff Section 13 These disposal of regulations may Section 14	exposure: Data not availa rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. irritation. toms of exposure: To the ercise appropriate procedu nation: RTECS #: Data n Ecological informa No data available degradability: No data available degradability: No data available ffects: An environmental h Disposal consider guidelines are intended be different. Dispose o Transport informa	e best of our knowledge, ures to minimize potential not available ation ertebrates: No data avai vailable Bioaccum PBT and v nazard cannot be exclude rations for the disposal of cata of in accordance with al ation	hazards. lable ulative potential: No rPvB assessment: No d in the event of unpro alog-size quantities o l local, state and fed	data available o data available ofessional handling or only. Federal regula	disposal. ations may aj	oply to empty c	container. State and/or loc
Aspiration hazar Potential health of Inhalation: May be Skin: May cause Eyes: May cause Signs and sympt not available. Exe Additional inform Section 12 Toxicity to fish: I Toxicity to fish: I Toxicity to dapher Toxicity to dapher Toxicity to algae: Persistence and Mobility in soil: I Other adverse eff Section 13 These disposal of regulations may Section 14 UN/NA number Hazard class:	exposure: Data not availa rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. irritation. toms of exposure: To the ercise appropriate procedu mation: RTECS #: Data r Ecological informa No data available nia and other aquatic inve : No data available degradability: No data available ffects: An environmental h Disposal consider guidelines are intended be different. Dispose o Transport informa r: Not applicable Not applicable	ble e best of our knowledge, irres to minimize potential not available ation ertebrates: No data avai vailable Bioaccum PBT and v nazard cannot be exclude rations for the disposal of cata of in accordance with a	hazards. lable ulative potential: No PvB assessment: No d in the event of unpro alog-size quantities of l local, state and fed Not Regulated Not Regulated Not applicable	data available o data available ofessional handling or only. Federal regula	disposal. ations may ar contract with	oply to empty c a licensed che	container. State and/or loc
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Aspiration hazar Potential health of nhalation: May be Skin: May cause Eyes: May cause Signs and sympt not available. Exe Additional inform for available. Exe Additional inform for a cause for a cause and a cause Additional inform for a cause for a cause and a cause for	exposure: Data not availa rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. irritation. toms of exposure: To the ercise appropriate procedu mation: RTECS #: Data n Ecological informa No data available nia and other aquatic invo : No data available degradability: No data available ffects: An environmental h Disposal consider guidelines are intended be different. Dispose o Transport informa r: Not applicable Not applicable	e best of our knowledge, irres to minimize potential not available attion ertebrates: No data avail vailable Bioaccum PBT and v nazard cannot be exclude rations for the disposal of cata of in accordance with al attion Shipping name: Packing group: N 2020 ERG Guide # attion	hazards. lable ulative potential: No PVB assessment: No d in the event of unpro alog-size quantities of l local, state and fed Not Regulated Not Regulated Not applicable	data available o data available ofessional handling or only. Federal regula leral regulations or	disposal. ations may ar contract with	oply to empty c a licensed che	container. State and/or loc emical disposal agency.
Aspiration hazar Potential health of nhalation: May be Skin: May cause Eyes: May cause Signs and sympt not available. Exe Additional inform fection 12 Toxicity to fish: If Toxicity to fish: If Toxicity to dapher Toxicity to algae: Persistence and of Abbility in soil: If Other adverse eff Section 13 These disposal of egulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15	exposure: Data not availa rd: Data not available effects: be harmful if inhaled. e harmful if swallowed. irritation. toms of exposure: To the ercise appropriate procedu mation: RTECS #: Data r Ecological informa No data available nia and other aquatic inve : No data available degradability: No data available ffects: An environmental h Disposal consider guidelines are intended be different. Dispose o Transport informa r: Not applicable Not applicable Not applicable Regulatory informa	e best of our knowledge, irres to minimize potential not available attion ertebrates: No data avail vailable Bioaccum PBT and v nazard cannot be exclude rations for the disposal of cata of in accordance with al attion Shipping name: Packing group: N 2020 ERG Guide # attion	hazards. lable ulative potential: No PVB assessment: No d in the event of unpro alog-size quantities of l local, state and fed Not Regulated Not Regulated Not applicable	data available o data available ofessional handling or only. Federal regula leral regulations or	disposal. ations may ar contract with	oply to empty c a licensed che	container. State and/or loc emical disposal agency.
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