CORROSIVE STORAGE CODE WHITE

Section 1

Chemical Product and Company Identification

Innovating Science[®] by Aldon Corporation

"cutting edge science for the classroom"

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CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300

For laboratory and industrial use only. Not for drug, food or household use.

5 5		(,		
Product SODIUM H	YDROXIDE, 0.01 MOLAR SOLUTION			
Synonyms Sodium Hyd	droxide, Water Solution (0.01M/0.01N)			
Section 2 Ha	zards Identification			
Signal word: WARNING Pictograms: No symbol r	required bry tract, gastrointestinal tract, eyes, skin. Hazard statement: itation. n.	P26 P33 P30 Ref	32+P313: If ski 05+P351+P338 move contact l	tatement: ds thoroughly after handling. din irritation occurs: Get medical attention. 8: IF IN EYES: Rinse cautiously with water for several minutes. lenses, if present and easy to do. Continue rinsing. re irritation persists: Get medical attention.
	rise classified (HHNOC) - Not Known rwise classified (PHNOC) - Not Known			
,	emposition / Information on Ingredients			
Chamical Name	. CAS#	0/		EINECS

Chemical Name		CAS #	%	EINECS	
Water Sodium hydroxide		7732-18-5 1310-73-2	99.96% 0.04%	231-791-2 215-185-5	
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 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: CAUSES 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: Dry chemical, water spray, alcohol foam. Can react with carbon dioxide to form sodium carbonate.

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. Contact with metals can generate hydrogen gas.

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.

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	ection 8 Exposure Controls / Personal Protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Linits.	Sodium hydroxide	STEL: C 2 mg/m ³	TWA: 2 mg/m ³	STEL: C 2 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.

Section 9							
	Physical & Chemical Prop	oerties					
Odor: No odor. Odor threshold: pH: Data not avai Melting / Freezing	lable. g point: ~ 0°C (~ 32°F) [water] 100°C (212°F) [water]	Flammability Explosion lim Vapor pressu Vapor density Relative dens	ate (Water = 1): < 1 (solid/gas): Not applica its: Lower / Upper: Not re (mm Hg): 14 [water] (Air = 1): 0.7 [water] ity (Specific gravity): 1 : Complete in water.	t applicable	Auto-ignitie Decompos Viscosity: Molecular f	on temperature	e
Section 10	Stability & Reactivity						
Chemical stabilit	y: Stable oid: Can react with carbon dioxide		ous polymerization: W carbonate.	'ill not occur.			
Incompatible ma	terials: Metals, acids, organic cor	npounds, organi	c nitro compounds.				
Hazardous decor	nposition products: Sodium oxid	le. Reacts with	metals to form flammable	e and explosive hy	drogen gas.		
Section 11	Toxicological Information						
Germ cell mutag Carcinogenity: I NTP: No compone IARC: No compone OSHA: No compoo Reproductive too STOT-single expo STOT-repeated e Aspiration hazar Potential health o Inhalation: May be Skin: May be han Eyes: Causes eye Signs and sympt edema, burning sc and upper respiral	ent of this product present at levels ient of this product present at level inent of this product present at level (icity: Data not available osure: Data not available xposure: Data not available d: Data not available	greater than or s greater than or els greater than o remely destructi ses skin burns. mation and ede tis, shortness of	requal to 0.1% is identifi or equal to 0.1% is identifi ve to the tissue of the mu na of the larynx, spasm, breath, headache, nause	ed as probable, po fied as a carcinoge ucous membranes inflammation and o	ssible or confir n or potential c and upper resp edema of the b	med human card arcinogen by OS biratory tract. ronchi, pneumo	SHA.
	LC50 - Gambusia affinis (Mosquito	, .		-			
Foxicity to daphn Foxicity to algae: Persistence and Mobility in soil: 1	ia and other aquatic invertebrat No data available degradability: No data available No data available fects: An environmental hazard ca	Bioaccum PBT and v	ulative potential: No d PvB assessment: No d	ata available data available			
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff	No data available degradability: No data available No data available	Bioaccum PBT and v	ulative potential: No d PvB assessment: No d	ata available data available			
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal (No data available degradability: No data available No data available fects: An environmental hazard ca	Bioaccum PBT and v annot be exclude disposal of cata	ulative potential: No d PvB assessment: No d in the event of unprofe alog-size quantities on	ata available data available essional handling o ly. Federal regul	r disposal. ations may aj	oply to empty c	
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal or regulations may	No data available degradability: No data available No data available fects: An environmental hazard co Disposal Considerations guidelines are intended for the	Bioaccum PBT and v annot be exclude disposal of cata ordance with a	ulative potential: No d PvB assessment: No d in the event of unprofe alog-size quantities on I local, state and fede	ata available data available essional handling o ly. Federal regul	r disposal. ations may aj	oply to empty c	
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal of regulations may Section 14 UN/NA number Hazard class:	No data available degradability: No data available No data available fects: An environmental hazard ca Disposal Considerations guidelines are intended for the be different. Dispose of in acc Transport Information (U ": Not applicable Ship Not applicable Pack	Bioaccum PBT and v annot be exclude disposal of cata ordance with a S DOT / CANA ping name: 1 ing group: N	ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on I local, state and feder DA TDG) Not Regulated	ata available data available essional handling o ly. Federal regul	r disposal. ations may aj contract with	oply to empty c a licensed che	
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal or regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15	No data available degradability: No data available No data available fects: An environmental hazard cr Disposal Considerations guidelines are intended for the be different. Dispose of in acc Transport Information (U r: Not applicable Ship Not applicable Pack lot applicable 2016 Regulatory Information	Bioaccum PBT and v annot be excluded disposal of cata ordance with a S DOT / CANA ping name: I ing group: N ERG Guide #	ulative potential: No d PvB assessment: No d in the event of unprofe alog-size quantities on l local, state and fede DA TDG) Not Regulated lot applicable Not applicable	ata available data available essional handling o ly. Federal regul ral regulations or	r disposal. ations may aj contract with	oply to empty c a licensed che	emical disposal agency.
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal or regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15 A chemical is conside	No data available degradability: No data available No data available fects: An environmental hazard ca Disposal Considerations guidelines are intended for the be different. Dispose of in acc Transport Information (U Transport Information (U Not applicable Ship Not applicable Pack lot applicable 2016 Regulatory Information ered to be listed if the CAS number for	Bioaccum PBT and v annot be excluded disposal of cata ordance with a S DOT / CANA ping name: I ing group: N ERG Guide #	ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on I local, state and fede DA TDG) Not Regulated lot applicable Not applicable	ata available data available essional handling o ly. Federal regul ral regulations or Reportable Qua	r disposal. ations may a contract with intity: No	oply to empty c a licensed che Ma	emical disposal agency. arine pollutant: No
Toxicity to daphn Toxicity to algae: Persistence and Mobility in soil: 1 Other adverse eff Section 13 These disposal of regulations may Section 14 UN/NA number Hazard class: Exceptions: N Section 15	No data available degradability: No data available No data available fects: An environmental hazard c: Disposal Considerations guidelines are intended for the be different. Dispose of in acc Transport Information (U : Not applicable Ship Not applicable Pack lot applicable 2016 Regulatory Information ered to be listed if the CAS number for ponent	Bioaccum PBT and v annot be excluded disposal of cata ordance with a S DOT / CANA ping name: I ing group: N ERG Guide #	ulative potential: No d PvB assessment: No d in the event of unprofe alog-size quantities on l local, state and fede DA TDG) Not Regulated lot applicable Not applicable	ata available data available essional handling o ly. Federal regul ral regulations or	r disposal. ations may aj contract with	oply to empty c a licensed che	emical disposal agency.

Section 1

Chemical Product and Company Identification

Innovating Science[®] hudden Consention 201 Boohester Street

Page E1 of E2

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300

	tting edge science for the classroo	Avon NIV	ester Street 14414-9409 6177	For laboratory and industrial use only. Not for drug, food or household use.
Product	PHENOLPHTHALEIN IN METHANOL			
Synonyms	Methanol with Phenolphthalein			
Section 2	Hazards Identification			
Target organs GHS Classifit Flammable liq Acute toxicity, Acute toxicity, Acute toxicity, Acute toxicity, Acute toxicity, Mutagenicity (Carcinogenicit Reproductive STOT-SE (Ca GHS Label in H325: Highly f H301: Toxic if H311: Suspec H361f: Susper H370: Causes Hazards not	GHS02 / GHS06 / GHS08 s: Central nervous system, Liver, Kidneys, He cation: uid (Category 2) oral (Category 3) dermal (Category 3) dermal (Category 3) inhalation (Category 3) (Category 2) ty (Category 1B) toxicity (Category 2) tegory 1) formation: Hazard statement: flammable liquid and vapour. swallowed. contact with skin. inhaled. ted of causing genetic defects. use cancer. cted of damaging fertility. s damage to organs. totherwise classified: Is not otherwise classified (HHNOC) - Not Know	υwn	P201: Obtai P202: Do no P210: Keep P210: Keep P241: Use of P242: Use of P243: Take P260: Do no P264: Wash P270: Do no P271: Use of P280: Wear P301+P330 CENTER or P303+P361 clothing. Rir P304+P340 comfortable P308+P312 if you feel un P370+P378 spray to exti P403+P233 Keep cool. P405: Store P501: Dispon	In case of fire: Use dry chemical, alcohol foam, carbon dioxide or water nguish. +P235: Store in a well-ventilated place. Keep container tightly closed.
Physical haza	ards not otherwise classified (PHNOC) - Not K Composition / Information on In			
Chemical Name		CAS #	%	EINECS
Methanol		67-56-1	99.5%	200-659-6

Chemical Name		CAS #	%	EINECS	
Methanol Phenolphthalein		67-56-1 77-09-8	99.5% 0.5%	200-659-6 201-004-7	
• * *					
Section 4	First Aid Measures				

INGESTION: MAY BE FATAL OR CAUSE BLINDNESS 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: VAPOR HARMFUL. HARMFUL IF INHALED. 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: HARMFUL IN CONTACT WITH SKIN. 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. Fires involving a small amount of combustibles may be smothered by dry chemical. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instanty. Closed containers exposed to heat may explode. Burns with a clear, almost invisible flame. Contact with strong oxidizers may cause fire.

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.

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 Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits.	Methanol	TWA: 262 ma/m ³ / STEL: 328 ma/m ³	TWA: 260 mg/m ³	TWA: 260 mg/m ³ / STEL: 325 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 & Chemical Prope	rties					
Appearance: Liquid Odor: Pungent odor Odor threshold: Da pH: Data not availat Melting / Freezing p Boiling point: 65°C Flash point: 11°C (S	: ita not available. ble. ioint: -98°C (-144°F)* (149°F)*	Flammability Explosion lir Vapor pressi Vapor densit Relative den	rate (Butyl acetate = 1): (solid/gas): Data not a nits: Lower / Upper: 7. Irre (mm Hg): 96 mm @ y (Air = 1): 1.11* sity (Specific gravity): (): Complete in water.	vailable. 3% / 36%* 20°C*	Auto-igniti Decompos Viscosity: Molecular	on temperature:	re: Data not available. le.
Section 10	Stability & Reactivity				1		
	I: Excessive temperatures, heat,	sparks, open		of ignition.			
•	ials: Strong oxidizing agents, str	•		sium, reducers, alka	alies.		
Hazardous decomp	osition products: Oxides of car	son and ionna	aldenyde.				
Section 11	Toxicological Information						
Serious eye damag Respiratory or skir Germ cell mutagen Carcinogenity: Da NTP: No component IARC classified: Gro OSHA: No compone CA Prop 65: WAF reproductive harm. Reproductive toxic STOT-single expose STOT-repeated exp Aspiration hazard: Potential health eff Inhalation: Inhalation Ingestion: Ingestion Cannot be made noi Skin: Contact with s Eyes: Contact with Signs and symptor Additional information	to f this product present at levels g up 2B: Possibly carcinogenic to h int of this product present at levels NING! : This product can expose ity: Data not available ure: The substance or mixture is posure: Data not available Data not available ects: n of this material may cause irritat may cause headache, dizziness, poisonous. kin can cause moderate irritation, eyes can cause severe irritation, e ns of exposure: See Potential h tion: RTECS #: Methanol: PC1	reater than o umans [Phen- greater than you to Metha classified as ion of the res weakness, et defatting, cra ven corneal b ealth effects a	olphthalein]. or equal to 0.1% is iden nol and Phenolphthalein specific target organ toxi piratory tract, nausea, sh phoria, drowsiness, sho cking and dermatitis. Sk urns. High concentratio	tified as a carcinogo which is known to cant, single exposu ortness of breath au tness of breath, vo in absorption may o	en or potential the State of Ca re, category 1 nd headache. miting and inco	carcinogen by Os alifornia to cause with narcotic effect pordination. Can	cancer, birth defects, or other cts.
Section 12	Ecological Information	L) 050 - 45 400	N In			
Toxicity to daphnia Toxicity to algae: N Persistence and de Mobility in soil: No Other adverse effect	gradability: Readily biodegradal data available :ts: An environmental hazard car	: Methanol:	Daphnia magna, EC50 = Bioaccumulative pote PBT and vPvB asses	>10,000 mg/l/48 ho ential: Not expecte sment: No data av	ed to bioaccum /ailable	ulate	
Section 13	Disposal Considerations	manal -f -		by Fodersters	lationa	naly to come	enteiner State
	idelines are intended for the di different. Dispose of in acco			· · · · ·			
Section 14	Transport Information (US						
UN/NA number:			Shipping name: M				
	omestic: 3 International: 3, (6	,	Packing group:	•	table Quant	ity: Yes 🛛 🕅	Marine pollutant: No
-	ited quantity equal to or less	nan 1 L	2016 ERG Guide #	131			
Section 15 A chemical is considered	Regulatory Information d to be listed if the CAS number for th	e anhydrous for	m is on the Inventory list				
Compone		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Methanol Phenolphthalein		Listed Listed	5,000 lbs. (2270 kg) Not listed	U154 Not listed	Listed Listed	Not listed Not listed	A WARNING -Cancer and Reproductive Harm - www.P65Warnings.ca.gov.
Section 16	Other Information						
	ed herein is furnished without warrant suitability and completeness of inform						ered by them and must make indepen-

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

Chemical Product and Company Identification

Innovating Science[®] by Aldon Corporation

"cutting edge science for the classroom"

221 Rochester Street Avon, NY 14414-9409 (585) 226-6177 CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300

For laboratory and industrial use only. Not for drug, food or household use.

Product IODINE CLOCK REAGENT A	
Synonyms Potassium Iodide, Aqueous Solution	
Section 2 Hazards Identification	
Signal word: WARNING Pictograms: GHS07 Target organs: Thyroid	Precautionary statement: P261: Avoid breathing mist/vapours/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P333+P313: If skin irritation or rash occurs: Get medical attention. P312: Call a POISON CENTER or doctor if you feel unwell. 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	
Water Potassium iodide		7732-18-5 7681-11-0	96.68% 3.32%	231-791-2 231-659-4	
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: 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 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. Contact with strong oxidizers may cause fire or explosion.

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.

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 Prote	ection		
Exposuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits:	Particulates not otherwise classified	None established	TWA: 15 ppm 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.

approved respire	ator.						
Section 9	Physical & Chemica	al Properties					
Odor: No odor. Odor threshold pH: Data not av Melting / Freezing	l: Data not available. /ailable. point: Approximately 0°C (32°F) (w /pproximately 100°C (212°F) (wa	ater) Relative density Relative density	ate (Water = 1): <1 (solid/gas): Data not its: Lower / Upper: re (mm Hg): 14 (water (Air = 1): 0.7 (water (Specific gravity): App : Complete in water.	Data not available er))	Auto-ignit Decompos Viscosity: Molecular	•	: Data not available re: Data not available. le.
Section 10	Stability & Reactivit	у					
Incompatible m	void: Protect from light, air, r	moisture and excessive th alkaline metals, diazo	nium salts, oxidants, l	ause evaporation.	trifluorides, ar	nd fluorine perchlo	prate, and may cause explosic
Hazardous deco	omposition products: Yield	s iodine when in contact	t with air. Releases io	dine, potassium mon	oxide, and hy	drogen iodide, wh	en in contact with moist air.
Section 11	Toxicological Inform	nation					
Carcinogenity: NTP: No composed IARC: No composed OSHA: No composed Reproductive to STOT-single ex STOT-repeated Aspiration haza Potential health Inhalation: May Ingestion: Large Skin: May cause Eyes: Can be in Signs and symp produce "iodism"	cause irritation of respiratory e doses may cause gastrointe e mild irritation and redness or ritating with redness and pain ptoms of exposure: Hypoth " which may be characterized	t levels greater than or e at levels greater than or at levels greater than or at levels greater than o le tract. estinal upset and weakne on prolonged contact. b. yroidism with possibility I by skin rash, running n	equal to 0.1% is iden r equal to 0.1% is iden ess. of goitre (hypertrophy ose, headache, and ir	tified as probable, pos ntified as a carcinoger of the throid gland), r ritation of mucous me	ssible or confi n or potential possible sens	rmed human carc carcinogen by OS	HA.
Section 12	also occur. Additional infor Ecological Informati		11575000 (Potassium	lodidej			
Toxicity to daph Toxicity to algae Persistence and Mobility in soil:	No data available nnia and other aquatic inver e: No data available d degradability: No data ava No data available effects: An environmental ha Disposal Considera	ailable Bioaccum PBT and v Izard cannot be excluded	ulative potential: No PvB assessment: N	o data available	disposal.		
	•	or the disposal of cata					ontainer. State and/or loca mical disposal agency.
Section 14	Transport Informat	ion (US DOT / CANAI	DA TDG)				
Hazard class: Exceptions:	er: Not applicable : Not applicable Not applicable	Shipping name: N Packing group: N 2016 ERG Guide #	lot applicable	Reportable Qua	antity: No	Ma	rine pollutant: No
Section 15	Regulatory Informat		in an the last of the second				
	idered to be listed if the CAS num						
	ponent	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65

Section 16 **Other Information**

Innovating Science[®]

SAFETY DATA SHEET

Section 1

Chemical Product and Company Identification

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CHEMTREC 24 Hour Emergency USA

Phone Number (800) 424-9300

"cutting edge science for the classroom" 221 Rochester (585) 226-6177	4-9409 Not for drug, food or household use.
Product IODINE CLOCK REAGENT B Synonyms None	
Section 2 Hazards Identification	
 Signal word: DANGER Pictograms: GHS07 / GHS08 Target organs: None known Output Output Output	 Precautionary statement: P312: Call a POISON CENTER or doctor if you feel unwell. P261: Avoid breathing mist/vapours/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P284: In case of inadequate ventilation, wear respiratory protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P333+P313: If skin irritation or rash occurs: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor. 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		
Water	7732-18-5	99.42%	231-791-2		
Sodium persulfate	7775-27-1	0.36%	231-892-1		
Starch, soluble	9005-84-9	0.10%	232-686-4		
Methylparaben	99-76-3	0.10%	202-785-7		
Sodium thiosulfate, anhydrous	7772-98-7	0.02%	231-867-5		
-					

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 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: 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.

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 Pro	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Methylparaben	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 & Chemical Prop	erties					
Odor: No odor. Odor threshold: Dat pH: Data not availab Melting / Freezing point:	le. Approximately 0°C (32°F) (water) imately 100°C (212°F) (water)	Flammability Explosion lim Vapor pressu Vapor density Relative density	tate (Water = 1): <1 (solid/gas): Data not its: Lower / Upper: 1 re (mm Hg): 14 (wate r (Air = 1): 0.7 (water) r (Specific gravity): App c: Complete in water.	Data not available r)	Auto-ignit Decompos Viscosity: Molecular		e: Data not available ure: Data not available. ble. re
Section 10	Stability & Reactivity						
	Stable Excessive temperatures which als: Alcohol, strong reducing ag	n cause evapora			ong oxidizing	agents, sodium	nitrate, iodides, silver salts,
Hazardous decompo	sition products: Sodium oxid	es, sulfur oxides	5.				
Section 11	Toxicological Information						
Carcinogenity: Data NTP: No component IARC: No component OSHA: No component Reproductive toxicit STOT-single exposu STOT-repeated expo Aspiration hazard: I Potential health effe	of this product present at levels of this product present at levels t of this product present at level y: Data not available re: Data not available sure: Data not available Data not available	greater than or	equal to 0.1% is ident	ified as probable, pos	sible or confi	med human car	0
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Section 1

Chemical Product and Company Identification

Page E1 of E2

Innovating Science[®] by Aldon Corporation "cutting edge science for the classroom"

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

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

Not for drug, food or household use.

Product	SODIUM THIOSULFATE, 0.15 MOLAR (0.15N) SOLUTION	
Synonyms	Sodium Thiosulfate, Water Solution	
Section 2	Hazards Identification	
to the Glob Chemicals. Signal word Pictograms Target orga GHS Classi GHS Label	ance or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of d: Not classified s: Not classified uns: None known ification: Not classified information: Hazard statement: Not classified ary statement: Not classified	Supplementary information: Do not breathe mist/vapours/spray. 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.

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 7732-18-5 96.3% 231-791-2 Sodium thiosulfate, anhydrous 7772-98-7 3.7% 231-867-5

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. 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 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.

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 Pro	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Sodium thiosulfate	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.

approved respirato							
Section 9	Physical & Chemic	al Properties					
	Data not available. lable. int: Approximately 0°C (32°F) (v roximately 100°C (212°F) (w	Water) Relative density	rate (Water = 1): <1 (solid/gas): Data not its: 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 & Reactivity						
Chemical stability Conditions to avo	 r: Stable id: Excessive temperatur 		ous polymerization:	Will not occur.			
	erials: Strong oxidizing ag	•		curv salts, lead.			
-	nposition products: Sodi			,			
Section 11	Toxicological Inform	mation					
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ERG: Emergency Response Guidebook. Form 06/2015

221 Rochester Street

Avon, NY 14414-9409

Section 1

Chemical Product and Company Identification

Page E1 of E2

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

For laboratory and industrial use only. Not for drug food or household use

		(585) 226-6177	
Product H	YDROCHLORIC ACID, 2 MOLAR (2 NORMAL) SOL	UTION	
Synonyms M	luriatic Acid, Water Solution ; Hydrogen Chloride, Wate	er Solution	
Section 2	Hazards Identification		
GHS Classifica Corrosive to me Skin irritant (Cate Eye irritant (Cate GHS Label info Hazard stateme H290: May be co	HS05 a Respiratory system, skin, eyes, lungs. ation: tals (Category 1) tegory 3) tegory 2B) prmation: ent(s): sorrosive to metals. mild skin irritation.		 Precautionary statement(s): P234: Keep only in original container. P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Get medical attention. P337+P313: If eye irritation persists: Get medical attention. P390: Absorb spillage to prevent material damage. P406: Store in corrosive resistant container with a resistant inner liner.

Hazards not otherwise classified:

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

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Section 3	Composition / Information on Ingredients					
Chemical Name		CAS #	%	EINECS		
Water Hydrochloric acid		7732-18-5 7647-01-0	93.72% 6.28%	231-791-2 231-595-7		
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. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE 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, 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. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

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: Neutralize spill with sodium bicarbonate or calcium hydroxide, 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.

Section 8	Exposure Controls / Personal Pro	tection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits.	Hydrogen chloride	STEL: C 2 ppm / C 2.98 mg/m ³	STEL: C 5 ppm / C 7 mg/m ³	STEL: C 5 ppm / C 7 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

Section 9							
A	Physical & Chemical Prop	erties					
Odor: Pungent odd Odor threshold: D pH: N/A Melting / Freezing p	Data not available. point: Approx. 0°C (32°F) [water] prox. 100°C (212°F) [water]	Flammability (s Explosion limit Vapor pressure Vapor density Relative densit	te (=1): Data not ava olid/gas): Data not ava s: Upper/Lower: Data (mm Hg): 14 [water] Air = 1): 0.7 [water] y (Specific gravity): 1 Soluble in water.	vailable. a not available.	Auto-igniti Decompos Viscosity: Molecular	ion temperature:	
Section 10 Stability & Reactivity							
Chemical stability Conditions to avo	:Stable id: Containers may burst when he		us polymerization: W act with water.	/ill not occur.			
Incompatible mate formaldehyde.	erials: Metals, bases, active meta	ls, alkali metals,	oxidizing agents, hydro	oxides, amines, carl	bonates, cyani	ides, sulfides, sulfi	ites,
Hazardous decom	position products: Hydrogen ch	loride gas.					
Section 11	Toxicological Information						
STOT-repeated ex Aspiration hazard Potential health ef Exercise appropria Inhalation: May be Ingestion: May be Skin: May cause i Eyes: May cause i Signs and sympto	sure: Data not available at this dii posure: Data not available : Data not available ffects: To the best of our knowled te procedures to minimize potentia harmful if inhaled. Material may of harmful if swallowed. ritation and/or burns. rritation and/or burns. oms of exposure: Data not availa ation: RTECS #: MW4025000 [H	ge the chemical, I hazards. cause irritation to ble at this dilutio	the tissue of the muco				ed. Specific data is not availal
Section 12	Ecological Information						
Toxicity to fish: L Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard car	s: No data availa Bioaccumu PBT and vi	ble Iative potential: No c VB assessment: No	ata available data available	r disposal.		
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Toxicity to fish: Li Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe Section 13 These disposal g regulations may b Section 14	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard can Disposal Considerations uidelines are intended for the d be different. Dispose of in acco Transport Information (US	s: No data availa Bioaccumu PBT and vi nnot be excluded isposal of catal rdance with all 5 DOT / CANAE	ble lative potential: No c vB assessment: No in the event of unprofe og-size quantities or local, state and fede A TDG)	lata available data available essional handling o lly. Federal regul	ations may a		
Toxicity to fish: L Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe Section 13 These disposal gregulations may b Section 14 UN/NA number: L Hazard class: 8	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard can Disposal Considerations uidelines are intended for the d be different. Dispose of in acco Transport Information (US JN1789 Shippi	s: No data availa Bioaccumu PBT and vi nnot be excluded isposal of catal rdance with all cont / CANAE ng name: Hydr g group: III	ble lative potential: No c vB assessment: No in the event of unprofe og-size quantities or local, state and fede A TDG)	lata available data available essional handling o lly. Federal regul	ations may a contract with ti ty: 5000 lbs	a licensed cher	
Toxicity to fish: Li Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe Section 13 These disposal gregulations may b Section 14 UN/NA number: Li Hazard class: 8 Exceptions: Limit Section 15	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard car Disposal Considerations uidelines are intended for the d be different. Dispose of in acco Transport Information (US JN1789 Shippi Packin ted quantity equal to or less than 5 Regulatory Information	s: No data availa Bioaccumu PBT and vi nnot be excluded isposal of catal rdance with all cont / CANAE ng name: Hydr ng ngup: III Lt	ble lative potential: No c vB assessment: No in the event of unprofe og-size quantities or local, state and fede A TDG) ochloric acid	Ata available data available essional handling o ly. Federal regul ral regulations or Reportable Quant	ations may a contract with ti ty: 5000 lbs	a licensed cher	mical disposal agency.
Toxicity to fish: Li Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe Section 13 These disposal gregulations may b Section 14 UN/NA number: Li Hazard class: 8 Exceptions: Limit Section 15 A chemical is consider	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard car Disposal Considerations uidelines are intended for the d be different. Dispose of in acco Transport Information (US JN1789 Shippi Packin ted quantity equal to or less than 5 Regulatory Information red to be listed if the CAS number for th	s: No data availa Bioaccumu PBT and vi nnot be excluded isposal of catal rdance with all cont / CANAE ng name: Hydr ng group: III Lt	ble lative potential: No c vB assessment: No in the event of unprofe og-size quantities or local, state and fede A TDG) ochloric acid is on the Inventory list.	ata available data available essional handling o lly. Federal regul ral regulations or Reportable Quant 2016 ERG Guide a	ations may a contract with t ity: 5000 lbs # 157	n a licensed cher (2270 kg) Mar	nical disposal agency. rine pollutant: No
Toxicity to fish: L' Toxicity to daphni Toxicity to algae: I Persistence and d Mobility in soil: N Other adverse effe Section 13 These disposal gregulations may b Section 14 UN/NA number: L Hazard class: 8 Exceptions: Limit Section 15	C50 - Gambusia affinis (Mosquito f a and other aquatic invertebrate No data available egradability: No data available o data available ects: An environmental hazard car Disposal Considerations uidelines are intended for the d be different. Dispose of in acco Transport Information (US JN1789 Shippi Packin ted quantity equal to or less than 5 Regulatory Information red to be listed if the CAS number for th	s: No data availa Bioaccumu PBT and vi nnot be excluded isposal of catal rdance with all cont / CANAE ng name: Hydr ng ngup: III Lt	ble lative potential: No c vB assessment: No in the event of unprofe og-size quantities or local, state and fede A TDG) ochloric acid	Ata available data available essional handling o ly. Federal regul ral regulations or Reportable Quant	ations may a contract with ti ty: 5000 lbs	a licensed cher	mical disposal agency.

Section 16 **Other Information**

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SAFETY DATA SHEET

GENERAL STORAGE CODE GREEN

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Section 1

Chemical Product and Company Identification

CHEMTREC 24 Hour Emergency USA Phone Number (800) 424-9300

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

	Itting edge science for the classroom"	ion 221 Rochester Street Avon, NY 14414-9409 (585) 226-6177
Product	COPPER METAL	

Synonyms	Copper Metal Powder / Copper Powder	
Section 2	Hazards Identification	
to the Glob Chemicals. Signal word Pictograms Target orga GHS Classi GHS Label	ance or mixture has not been classified as hazardous according ally Harmonized System (GHS) of Classification and Labeling of : Not classified ns: Liver, Kidneys fication: Not classified information: Hazard statement(s): Not classified ary statement(s): Not classified	Supplemental information: Do not breathe dust or fume. 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.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Compos	Section 3 Composition / Information on Ingredients			
Chemical Name	CAS	\$ # %	EINECS	
Copper metal	7440-	50-8 100%	231-159-6	
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: HARMFUL IF INHALED AS FUME. Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: MAY CAUSE 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 triclass, dry chemical fire extinguisher. Do NOT use water on fire where molten metal is present.

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. Molten metals produce fume, vapor and/or dust that may be toxic and/or a respiratory irritant. Metal reacts with oxidizing agents.

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. Remove all sources of ignition. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

ection 7	Handling & S	torage			Page E2 c
ead label on contain	or before using	Do not wear contact lenses when working with chemicals	Keen container tightly closed	Keen out of reach of children	Lleo with

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 fumes from molten metals. Wash thoroughly after handling. Remove and wash clothing before reuse.

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

Section 8	Exposure Controls / Personal Pro	tection			
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Linits.	Copper, dusts and mists, as Cu	TWA: 1 mg/m ³	TWA: 1 mg/m ³	TWA: 1 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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Physical & Chemical Properties Section 9

Appearance: Solid. Red-brown, lustrous metal.	Evaporation rate (= 1): Not applicable	Partition coefficient: Data not available
Turns green on exposure to moist air.	Flammability (solid/gas): Not applicable	Auto-ignition temperature: Not applicable
Odor: No odor.	Explosion limits: Lower / Upper: Not applicable	Decomposition temperature: Data not available.
Odor threshold: Data not available.	Vapor pressure (mm Hg): 1 mm @ 1628°C	Viscosity: Data not available.
pH: Data not available.	Vapor density (Air = 1): Data not available	Molecular formula: Cu
Melting / Freezing point: 1083°C (1981°F)	Relative density (Specific gravity): 8.92 @ 20°C	Molecular weight: 63.55
Boiling point: 2595°C (4703°F)	, , , , , , , , , , , , , , , , , , ,	Molecular weight. 03.55
Flash point: Not applicable	Solubility(ies): Insoluble	
Section 10 Stability & Reactivity		

Hazardous polymerization: Will not occur.

Chemical stability: Stable

S

Conditions to avoid: Excessive temperatures and heat.

Incompatibilities with other materials: Strong oxidizers may cause a violent reaction.

Hazardous decomposition products: At temperatures above melting point, toxic fumes or vapors may be emitted.

Section 11 **Toxicological Information**

Acute toxicity: Data not available

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.

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: Inhalation of dust or fumes may irritate respiratory system. Symptoms include cough, headache, sore throat, shortness of breath.

Ingestion: May be harmful if swallowed. Symptoms include abdominal pain, nausea, vomiting.

Skin: May cause irritation and redness.

Eyes: Contact with eyes may cause redness and pain.

Signs and symptoms of exposure: Over-heating of alloy can produce metal fumes and oxides. Fumes of copper may cause metal fume fever with flu-like symptoms and skin and hair discolorization. Copper dust and fume cause irritation of the upper respiratory tract, metallic taste in the mouth, and nausea. Chronic poisoning results in Wilson's disease characterized by a hepatic cirrhosis, brain damage, denyelination, renal disease and copper depostion in the cornea. Additional information: RTECS #: GL5325000

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. Transport Information (US DOT / CANADA TDG) Section 14

		•	,				
UN/NA number: I Hazard class: Not Exceptions: Not a	applicable	Shipping name: Packing group: 2016 ERG Guide	0	Reportable Qu	antity: No	Ма	rine pollutant: No
Section 15	Regulatory Information	tion					
A chemical is considered	to be listed if the CAS num	ber for the anhydrous fo	orm is on the Inventory list.				
Componer	nt	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Copper		Listed	Not listed	Not listed	Listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.
Section 16	Other Information						reproductive toxicity.
Section 16	Other information						
dent determinations of su	itability and completeness	of information from all se	ources to assure proper use	of these materials and	d the safety and h	nealth of employees	red by them and must make indepen- . NTP: National Toxicology Program, osure, RE: Repeated Exposure,

Form 06/2015

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GENERAL STORAGE CODE GREEN

Section 1

Chemical Product and Company Identification

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Innovating Science[®] by Aldon Corporation

"cutting edge science for the classroom"

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

Product	ASPIRIN TABLET - REGULAR	
Synonyms	Aspirin	
Section 2	Hazards Identification	
Signal word Pictograms: Target organ	No symbol required	Precautionary statement(s): P312: Call a POISON CENTER or doctor if you feel unwell.
GHS Classif Acute toxicity	ication: , oral (Category 5)	
	nformation: Hazard statement(s): e harmful if swallowed.	

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	
Aspirin (each tablet) Inactive ingredients: (Corn starch, Hypromellose, Powdere	50-78-2 ed cellulose, Triacetin. Ma	325 mg y contain Carnauba	200-064-1 wax.	
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: 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 reuse if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

Page E2 of E2

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 Limiter	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits:	Acetylsalicylic acid	TWA: 5 mg/m ³	None	TWA: 5 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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

0	Discrete al 9 Observis al Dus		
Section 9 Appearance: Solid	Physical & Chemical Pro White, round tablets	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: Da pH: Data not availal		Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available	Decomposition temperature: Data not available. Viscosity: Data not available.
	ooint: Data not available	Vapor density (Air = 1): Data not available	Molecular formula: Mixture Molecular weight: Mixture
Boiling point: Data Flash point: Not fla		Relative density (Specific gravity): Data not available Solubility(ies): Soluble in water	
Section 10	Stability & Reactivity		
Chemical stability: Conditions to avoid	Stable d: Excessive temperatures, mo	Hazardous polymerization: Will not occur. isture and water.	
Incompatible mate	rials: Strong oxidizers, strong a	lkali, hydrolyses in moist air. Decomposes in hot water.	
Hazardous decom	oosition products: Carbon oxi	des.	
Section 11	Toxicological Information		
	al-rat LD50: 1124-1228 mg/kg [A t ation: Data not available	cetylsalicylic acid]	
	ge/irritation: Data not available		
• •	n sensitization: Data not availa nicity: Data not available	ble	
Carcinogenity: Da	ta not available		
		s greater than or equal to 0.1% is identified as a known or an Is greater than or equal to 0.1% is identified as probable, pos	
OSHA: No compone	ent of this product present at lev	els greater than or equal to 0.1% is identified as a carcinoger	n or potential carcinogen by OSHA.
CA Prop 65: 4 WAH harm.	RNING! : This product can expo	se you to Acetylsalicylic acid (Asprin), which is known to the S	State of California to cause birth defects or other reproductive
Reproductive toxic	ity: Data not available		
• •	sure: Data not available		
Aspiration hazard:	Data not available		
Potential health eff INHALATION: May	rects: / be harmful if inhaled.		
INGESTION: May	be harmful if swallowed. Ingesti	on of large amounts may cause rapid or deep breathing, nau	sea, vomiting, ringing in the ears or a loss of hearing,
	e, low blood pressure, irregular l skin may cause irritation. EYE	neartbeat. S: Contact with eyes may cause irritation.	
Signs and symptor	ms of exposure: Allergic react		swelling of the face, throat or tongue, and breathing problems,
Section 12	Ecological Information		
•	()	LC50 = >1,000 mg/l/48 hours [Acetylsalicylic acid]	
Toxicity to daphnia Toxicity to algae: N	•	t es: Daphnia magna (Crustacea), EC50 = >100 mg/l/48 hour	s [Acetylsalicylic acid]
• •	gradability: No data available	Bioaccumulative potential: No data available	
Mobility in soil: No		PBT and vPvB assessment: No data available	dianaaal
Section 13	Disposal Considerations	annot be excluded in the event of unprofessional handling or	шэрозаі.
These disposal gu	idelines are intended for the		ations may apply to empty container. State and/or local
		ordance with all local, state and federal regulations or	contract with a licensed chemical disposal agency.
Section 14	Transport Information (U		

UN/NA number: Not applicable Hazard class: Not applicable Exceptions: Not applicable	Shipping name: N Packing group: No 2016 ERG Guide #	ot applicable	Reportable (Quantity: No	Ма	rine pollutant: No
Section 15 Regulatory Informa	ition					
A chemical is considered to be listed if the CAS nur	mber for the anhydrous form	is on the Inventory list.				
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Acetylsalicylic acid, (CAS # 50-78-2)	Listed	Not listed	Not listed	Listed	Not listed	WARNING - Reproductive Harm - www.P65Warnings.ca.gov.
Section 16 Other Information						

GENERAL STORAGE CODE GREEN

Section 1

Chemical Product and Company Identification

Page E1 of E2 Hour Emergency USA

Innovating Science[®] by Aldon Corporation

"cutting edge science for the classroom"

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

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

Product	ANTACID, EFFERVESCENT	
Synonyms	None	
Section 2	Hazards Identification	
to the Glob Chemicals Signal wor Pictograms Target orga GHS Class GHS Label	ance or mixture has not been classified as hazardous according bally Harmonized System (GHS) of Classification and Labeling of d: None required s: No symbol required ans: None known ification: None required information: Hazard statement: None required ary statement: None required	Supplemental information: This product is sold for laboratory use only. Do not take internally. 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. Ge 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				
Sodium bicarbonate Citric acid, anydrous Acetylsalicylic acid		77-92-9	Approximately 50% 30-40% Approximately 10%	201-069-1				
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. 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 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.

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.

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)		
	Acetylsalicylic acid	TWA: 5 mg/m ³	None	TWA: 5 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 dusty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Section 9	Physical & Chemical Pro	perties					
Appearance: Solid Odor: No odor. Odor threshold: D pH: Data not availa Melting / Freezing Boiling point: Data Flash point: Data r	ata not available. ble. p oint: Data not available a not available	Flammability (Explosion limi Vapor pressur Vapor density Relative density	tte (= 1): Data not a solid/gas): Data not a ts: Lower / Upper: I e (mm Hg): Data not (Air = 1): Data not av (Specific gravity): Data Soluble in water	available. Pata not available available ailable	Auto-ignitie Decompos Viscosity: Molecular f		: Data not available re: Data not available. ıle.
Section 10	Stability & Reactivity	1					
Chemical stability: Conditions to avoi	Stable d: Avoid contact with moisture.	Hazardo	ous polymerization:	Will not occur.			
incompatible mate	rials: Strong oxidizers.						
Hazardous decom	position products: Carbon oxid	des.					
Section 11	Toxicological Information	I					
IARC: No compone OSHA: No compone CA Prop 65: A WA Reproductive toxis STOT-single expose STOT-repeated exp Aspiration hazard: Potential health ef Inhalation: May be Ingestion: May be I Skin: Contact with Eyes: Contact with Signs and sympto	t of this product present at levels nt of this product present at levels ent of this product present at level ent of this product present at level RNING! : This product can exposi- city: Data not available sure: Data not available Data not available Data not available fects: harmful if crushed and inhaled. harmful if swallowed. skin may cause irritation. eyes may cause irritation. ms of exposure: See Potential	Is greater than or els greater than o se you to Acetylsa health effects abo	equal to 0.1% is ident r equal to 0.1% is iden licylic acid, which is k bye.	fied as probable, po tified as a carcinoge	ossible or confir en or potential c	med human carc arcinogen by OS	SHA.
Section 12	tion: RTECS #: VO0700000 [Ecological Information	Acetyisalicylic aci	uj				
Toxicity to algae: N Persistence and de Mobility in soil: No Other adverse effe Section 13 These disposal gu	a and other aquatic invertebrat lo data available agradability: No data available o data available cts: An environmental hazard c Disposal Considerations uidelines are intended for the	Bioaccumu PBT and vi annot be excluded disposal of cata	ulative potential: No PvB assessment: No d in the event of unpro log-size quantities c	o data available fessional handling c nly. Federal regu	lations may a		
egulations may b Section 14	e different. Dispose of in acc Transport Information (U			eral regulations of	r contract with	a licensed che	emical disposal agency.
UN/NA number: Hazard class: N Exceptions: No	lot applicable Pacl	oping name: N king group: N 6 ERG Guide #		Reportable (Quantity: No	o Ma	arine pollutant: No
Section 15	Regulatory Information						
-	ed to be listed if the CAS number for				DC:	100	
Compon Sodium bicarbonate		TSCA Listed	CERLCA (RQ) Not listed	RCRA code Not listed	DSL Listed	NDSL Not listed	CA Prop 65 WARNING - Reproductive Harm
							- www.P65Warnings.ca.go
Section 16	Other Information						
	ned herein is furnished without warra suitability and completeness of infor						