CORROSIVE STORAGE CODE WHITE

Page E1 of E2

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.

Product	FERROUS CHLORIDE, 0.1 MOLAR SOLUTION	
Synonyms	Iron(II) Chloride, Water Solution	
Section 2	Hazards identification	
Pictograms Target orga GHS Class Corrosive to Eye damag GHS Label H290: May	d: WARNING s: GHS05 / GHS07 ans: Cardiovascular and central nervous systems, liver, kidneys ification: o metals (Category 1) e (Category 2A) information: Hazard statement: be corrosive to metals. ses serious eye irritation.	Precautionary statement: P234: Keep only in original container. P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P300: Absorb spillage to prevent material damage. P406: Store in corrosive resistant container with a resistant inner liner. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remo 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	tion 3 Composition / information on ingredients					
Chemical Name		CAS #	%	EINECS		
Water Ferrous chloride, te	trahydrate	7732-18-5 13478-10-9	98.02% 1.98%	231-791-2 231-843-4 [Iron dichloride CAS # 7758-94-3]		
Section 4	First aid measures					

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

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

EYE CONTACT: CAUSES 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: 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 protection				
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)	
Exposure Limits.	Iron salts, soluble, as Fe	TWA: 1 mg/m ³	No listing	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAnirator wodr

Section 9	Physical and chemical pro	perties					
	 Yellow-orange ata not available. ble Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water) 	Evaporation r Flammability Explosion lim Vapor pressu Vapor density Relative density	ate (Water = 1): <1 (solid/gas): Data not a its: Lower / Upper: Data re (mm Hg): 14 (water) r (Air = 1): 0.7 (water) r (Specific gravity): Appro : Complete in water.	ata not available	Auto-igniti Decompos Viscosity: Molecular		e: Data not available Ire: Data not available. ble. re
Section 10	Stability and reactivity						
Incompatible mater	Stable : Excessive temperatures which ials: Strong oxidizing agents, m osition products: Hydrogen ga	n cause evapora etals, strong bas	ses, reducing agents, al				
Section 11	Toxicological information						
Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No component IARC: No component OSHA: No component Reproductive toxici	e/irritation: Data not available sensitization: Data not available icity: Data not available a not available of this product present at levels to f this product present at levels nt of this product present at levels ty: Data not available ure: Data not available	greater than or e greater than or	equal to 0.1% is identifi	ed as probable, pos	sible or confir	med human card	0 ,
Aspiration hazard: Potential health effe Inhalation: May be h Ingestion: May be has Skin: Prolonged com Eyes: Causes seriou Signs and symptom not available. Exerci	osure: Data not available Data not available ects: armful if inhaled. armful if swallowed. tact with skin causes irritation ar is eye irritation. Is of exposure: To the best of o se appropriate procedures to mi	our knowledge th nimize potential		nd toxicological prop	erties have no	t been thorough	ly investigated. Specific data
Aspiration hazard: Potential health effe Inhalation: May be h Skin: Prolonged con Eyes: Causes serior Signs and symptom not available. Exerci Additional informat Section 12	osure: Data not available Data not available Data not available ects: armful if inhaled. armful if swallowed. tact with skin causes irritation ar is eye irritation. Is of exposure: To the best of of se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information	our knowledge th nimize potential		nd toxicological prop	erties have no	t been thorough	ly investigated. Specific data
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Aspiration hazard: Potential health effe Inhalation: May be h Skin: Prolonged com Eyes: Causes seriou Signs and symptom not available. Exerci Additional informat Section 12 Toxicity to fish: No Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effect Section 13 These disposal gui regulations may be	osure: Data not available Data not available Data not available Data not available Data not available Data not available armful if inhaled. Tact with skin causes irritation ar us eye irritation. To the best of of se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information data available and other aquatic invertebrate of data available gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the c	bur knowledge th nimize potential ble s: No data avail Bioaccum PBT and v nnot be excluded	hazards. lable ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on	ata available data available essional handling or ly. Federal regula	disposal. itions may ap	oply to empty c	container. State and/or loca
Aspiration hazard: Potential health effe Inhalation: May be h Skin: Prolonged com Eyes: Causes seriou Signs and sympton not available. Exerci Additional informat Section 12 Toxicity to fish: No Toxicity to fish: No Toxicity to daphnia Toxicity to algae: No Other adverse effect Section 13 These disposal gui regulations may be Section 14 UN/NA number: Hazard class: 8	osure: Data not available Data not available Data not available Data not available Data not available Data not available armful if inhaled. Tact with skin causes irritation ar us eye irritation. To the best of of se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information data available and other aquatic invertebrate of data available gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the co different. Dispose of in acco	bur knowledge th nimize potential ble Bioaccum PBT and v nnot be excluded isposal of cata rdance with all name: Ferrou roup: II	hazards. lable ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on l local, state and fede us chloride, solution Reportabl	ata available data available essional handling or ly. Federal regula	disposal. ttions may ap contract with	oply to empty c a licensed che	container. State and/or loc
Aspiration hazard: Potential health effe Inhalation: May be h Ingestion: May be h Skin: Prolonged com Eyes: Causes seriou Signs and sympton not available. Exerci Additional informat Section 12 Toxicity to fish: No Toxicity to daphnia Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effec Section 13 These disposal gui regulations may be Section 14 UN/NA number: Hazard class: 8 Exceptions: Lim	osure: Data not available Data not available Data not available Data not available Data not available Data not available armful if inhaled. Tact with skin causes irritation ar is eye irritation. To the best of of se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information data available and other aquatic invertebrate of data available gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the co different. Dispose of in acco Transport information NA1760 Shipping to Packing g	bur knowledge th nimize potential ble Bioaccum PBT and v nnot be excluded isposal of cata rdance with all name: Ferrou roup: II	hazards. lable ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on l local, state and fede us chloride, solution Reportabl	ata available data available essional handling or ly. Federal regula ral regulations or o e Quantity: 100	disposal. ttions may ap contract with	oply to empty c a licensed che	ontainer. State and/or loc mical disposal agency.
Aspiration hazard: Potential health effe Inhalation: May be h Skin: Prolonged com Eyes: Causes seriou Signs and sympton not available. Exerci Additional informat Section 12 Toxicity to fish: No Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effect Section 13 These disposal gui regulations may be Section 14 UN/NA number: Hazard class: 8 Exceptions: Lim Section 15	osure: Data not available armful if inhaled. armful if swallowed. tact with skin causes irritation ar is eye irritation. so of exposure: To the best of or se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information data available and other aquatic invertebrate o data available gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the co o different. Dispose of in acco Transport information NA1760 Shipping in Packing g ited quantity equal to or less	bur knowledge th nimize potential ble s: No data avail Bioaccum PBT and v nnot be excluded isposal of cata rdance with all name: Ferrou roup: Il than 1 Lt	hazards. lable ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on l local, state and fede us chloride, solution Reportabl 2020 ERG	ata available data available sssional handling or ly. Federal regula ral regulations or o e Quantity: 100 b Guide # 154	disposal. ations may ap contract with Ibs (45.4 kg	oply to empty c a licensed che) Ma	container. State and/or loca emical disposal agency. arine pollutant: No
Aspiration hazard: Potential health effe Inhalation: May be h Skin: Prolonged com Eyes: Causes seriou Signs and sympton not available. Exerci Additional informat Section 12 Toxicity to fish: No Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No Other adverse effect Section 13 These disposal gui regulations may be Section 14 UN/NA number: Hazard class: 8 Exceptions: Lim Section 15	osure: Data not available armful if inhaled. armful if swallowed. tact with skin causes irritation ar is eye irritation. is of exposure: To the best of or se appropriate procedures to mi ion: RTECS #: Data not availa Ecological information data available and other aquatic invertebrate o data available gradability: No data available data available ts: An environmental hazard ca Disposal considerations delines are intended for the co offferent. Dispose of in acco Transport information NA1760 Shipping in Packing g ited quantity equal to or less Regulatory information d to be listed if the CAS number for the	bur knowledge th nimize potential ble s: No data avail Bioaccum PBT and v nnot be excluded isposal of cata rdance with all name: Ferrou roup: Il than 1 Lt	hazards. lable ulative potential: No d PvB assessment: No d d in the event of unprofe alog-size quantities on I local, state and fede us chloride, solution Reportabl 2020 ERG	ata available data available essional handling or ly. Federal regula ral regulations or o e Quantity: 100	disposal. ttions may ap contract with	oply to empty c a licensed che	ontainer. State and/or loca mical disposal agency.

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

GENERAL STORAGE CODE GREEN

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE[®] by Aldon 221 Roc 24 Roc

"Cutting edge science for the classroom"

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

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

Not for drug, food or household use.

Product POTASSIUM IODIDE, 0.1 MOLAR SOLUTION	
Synonyms Potassium Iodide, Aqueous Solution	
Section 2 Hazards identification	
Signal word: WARNING Pictograms: GHS07 Target organs: Thyroid GHS Classification: Acute toxicity, oral (Category 5) Skin sensitization (Category 1A) GHS Label information: Hazard statement: H303: May be harmful if swallowed. H317: May cause an allergic skin reaction.	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	Composition / information on ingredients			
Chemical Name		CAS #	%	EINECS	
Water Potassium iodide		7732-18-5 7681-11-0	98.34% 1.66%	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 protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
	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.

Section 9 Physical and chemical pro	operties	
Appearance: Clear, colorless liquid. Odor: No odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water) Flash point: Data not available	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.	Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture
Section 10 Stability and reactivity		

Chemical stability: Stable

Hazardous polymerization: Will not occur

Conditions to avoid: Protect from light, air, moisture and excessive temperatures which cause evaporation.

Incompatible materials: Reacts violently with alkaline metals, diazonium salts, oxidants, bromine and chlorine trifluorides, and fluorine perchlorate, and may cause explosion and/or fire. NOTE: Solutions of this product are corrosive to most metals.

Hazardous decomposition products: Yields iodine when in contact with air. Releases iodine, potassium monoxide, and hydrogen iodide, when in contact with moist air.

Section 11 **Toxicological information**

Acute toxicity: Oral-rat LD50: 4800 mg/kg [Potassium iodide]

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 cause irritation of respiratory tract.

Ingestion: Large doses may cause gastrointestinal upset and weakness.

Skin: May cause mild irritation and redness on prolonged contact.

Eyes: Can be irritating with redness and pain.

Signs and symptoms of exposure: Hypothyroidism with possibility of goitre (hypertrophy of the throid gland), possible sensitization of skin. Chronic ingestion of iodides may produce "iodism" which may be characterized by skin rash, running nose, headache, and irritation of mucous membranes. Weakness, anemia, loss of weight, and general depression may also occur. Additional information: RTECS #: NN1575000 [Potassium iodide]

Section 12 Ecological information

Toxicity to fish: No data available

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Persistence and degradability: No data available Bioaccumulative potential: No data available Mobility in soil: No data available

PBT and vPvB assessment: No data available

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

Section 13 **Disposal considerations**

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

Section 14	Transport in	formation	
UN/NA number	Not applicable	Shinning name:	Not Pogulated

Hazard class: Not applicable Exceptions: Not applicable	Packing group: N 2020 ERG Guide #	ot applicable	Reportable Qu	antity: No	М	arine pollutant: No
Section 15 Regulatory in	formation					
A chemical is considered to be listed if the 0	CAS number for the anhydrous form	is on the Inventory list.				
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Potassium iodide	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

Section 16 Other information

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

reproductive toxicity

GENERAL STORGAE CODE GREEN

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE[®] by Aldon 221 Rot Avgr. 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 BROMIDE 0.1 MOLAR SOLUTION	
Synonyms	Sodium Bromide, Water Solution	
Section 2	Hazards identification	
to the Glob Chemicals. Signal word Pictograms Target orga GHS Class GHS Label	ance or mixture has not been classified as hazardous according hally 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: 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 Sodium bromide		7732-18-5 7647-15-6	98.97% 1.03%	231-791-2 231-599-9	
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 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: Solutions: 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: Recover for reuse if not contaminated. 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.

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 mist/vapours or spray. 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 prot	ection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Sodium bromide	Not established	Not established	Not establishe

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.			, c				
Section 9	Physical and chemical pr	operties					
Appearance: Clear, cc Odor: No odor. Odor threshold: Data pH: Data not available Melting / Freezing point: Boiling point: Approxi Flash point: Data not a	lorless liquid not available Approximately 0 °C (32°F) (Water) mately 100°C (212°F)	Evaporation ra Flammability (s Explosion limit Vapor pressure Vapor density (Relative density (te (Butyl acetate = 1) solid/gas): Data not a s: Lower / Upper: D e (mm Hg): 14 (water Air = 1): 0.7 (water) Specific gravity): Approx Complete in water.	ivailable lata not available)	Auto-igniti Decompos Viscosity: Molecular		: Data not available re: Data not available ble e
Section 10	Stability and reactivity				1		
Incompatible materi Hazardous decomp	: Excessive temperatures whic als: Strong oxidizers and acide osition products: Hydrogen b	h cause evaporat s. romide gas and/o		Will not occur.			
Section 11	Toxicological information						
Skin corrosion/irrita Serious eye damage Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No component IARC classified: No co OSHA: No component Ca Prop 65: This pro Reproductive toxici STOT-single exposed STOT-repeated exp Aspiration hazard: Potential health effet Inhalation: Inhalatior Ingestion: Ingestion Skin: Contact with sl Eyes: Contact with sl Eyes: Contact with sl Eyes: Contact with sl Signs and symptom thoroughly investigat Additional informat	of this product present at levels omponent of this product present at of this product present at level duct does not contain any chen ty: Data not available pre: Data not available Data not available Data not available Data not available Data not available cts: In may cause dizziness, drowsin causes dizziness, drowsiness, kin causes irritation defatting or yes may cause blindness. Is of exposure: See Potential ed. Specific data is not availab ion: RTECS #: VZ3150000 (Second)	ble greater than or en nt at levels greater els greater than or nicals known to th ess, nausea, vom decreased reaction prolonged conta- health effects abor e. Exercise appr	equal to 0.1% is identii er than or equal to 0.1 equal to 0.1% is iden e State of California to state of California to n, euphoria, nausea, ct.	ied as a known or ar % is identified as pro- tified as a carcinoge o cause cancer or re- entrate and irritation vomiting, staggering knowledge the cher	obable, possibl en or potential of productive toxi of the throat. gait and coma nical, physical	e or confirmed h carcinogen by OS city.	SHA.
Section 12	Ecological information						
Toxicity to daphnia Toxicity to algae: So Persistence and deg Mobility in soil: No Other adverse effec Section 13 These disposal gui	ts: An environmental hazard ca Disposal considerations	es: Daphnia mag concentration: 5 Bioaccumu PBT and vi annot be excluded disposal of cata	na (Water flea), conce 800 mg/L/24H (Sodiur Ilative potential: No PvB assessment: No d in the event of unpro- log-size quantities co	ntration:> 1000 mg/l n bromide) data available data available fessional handling o nly. Federal regul	r disposal. lations may a	pply to empty c	container. State and/or local emical disposal agency.
UN/NA number:	•	name: Not Re	aulated				
Hazard class: Not Exceptions: Not	t applicable Packing	Guide # Not app	olicable Repo	ortable Quantity:	No	Marine po	ollutant: No
Section 15	Regulatory information						
A chemical is considered Compone	to be listed if the CAS number for	the anhydrous form	is on the Inventory list.	RCRA code	DSL	NDSL	CA Prop 65
Sodium bromide		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						
							ered by them and must make indepen- s. NTP: National Toxicology Program,

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

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE^{® by Aldon} 221 Roc

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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	CALCIUM CHLORIDE, 0.1 MOLAR SOLUTION	
Synonyms	Calcium Chloride, Aqueous Solution	
Section 2	Hazards identification	
Pictograms Target orga GHS Classi Eye irritation GHS Label	t: WARNING : No symbol required ns: None known fication: (Category 2B) information: Hazard statement: es eye irritation.	Precautionary statement: P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

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

Section 3 Composition / information on ingredients **Chemical Name** CAS # % EINECS 7732-18-5 98.9% 231-791-2 Water Calcium chloride 10043-52-4 1 10% 233-140-8 Section 4 First aid measures

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

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

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

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

Section 5 Fire fighting measures

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

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

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

Section 6 Accidental release measures

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

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

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

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

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

ection 9	Physical and chemical pr	operties					
Appearance: Cle Odor: No odor. Odor threshold: oH: Data not avai Melting / Freezing po	ear, colorless liquid. Data not available. ilable. int: Approximately 0°C (32°F) (water) proximately 100°C (212°F) (water)	Evaporation ra Flammability Explosion lim Vapor pressur Vapor density Relative density	ate (Water = 1): <1 (solid/gas): Data not its: Lower / Upper: I re (mm Hg): 14 (wate (Air = 1): 0.7 (water) (Specific gravity): App : Complete in water.	Data not available r)	Auto-igniti Decompos Viscosity: Molecular	•	e: Data not available Ire: Data not available. ble. re
ection 10	Stability and reactivity						
Chemical stability			ous polymerization:	Will not occur.			
	bid: Excessive temperatures which						
•	terials: Avoid contact with sulfurio		e hydrogen may be ge	nerated from contact	with metals s	uch as zinc and	sodium.
lazardous decon	nposition products: None know	n.					
ection 11	Toxicological information	I					
)ral-rat LD50: 2100 mg/kg ; Derm		5000 mg/kg [Calcium	chloridel			
-	ritation: Data not available		eeco mana loaioidin				
	age/irritation: Data not available						
-	kin sensitization: Data not availa						
	enicity: Data not available						
Carcinogenity: D	-						
•••	ent of this product present at levels	s greater than or e	equal to 0.1% is identif	fied as a known or ant	ticipated carci	inogen by NTP.	
	ent of this product present at leve						
	nent of this product present at leve	0		0		0,	SHA.
	product does not contain any chen	nicals known to th	ie State of California to	o cause cancer or rep	roductive toxi	city.	
•	<pre>kicity: Data not available osure: Data not available</pre>						
• •							
TOT-repeated or	vnosure: Data not available						
•	xposure: Data not available d: Data not available						
spiration hazard	: Data not available						
Aspiration hazard Potential health e	d: Data not available effects:	spiratory tract (no	ose and throat).				
Aspiration hazard Potential health e nhalation: Dust m	: Data not available			irritation or ulceration	1.		
Aspiration hazard Potential health e nhalation: Dust m ngestion: Low to	d: Data not available effects: nay cause irritation to the upper re	e amounts may re	sult in gastrointestinal	irritation or ulceration	1.		
Aspiration hazard Potential health e nhalation: Dust m ngestion: Low to Skin: Contact with	d: Data not available effects: nay cause irritation to the upper re xicity if swallowed. However, large	e amounts may re defatting on prolo	sult in gastrointestinal nged contact.	irritation or ulceration	1.		
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ent 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

Section 1

Identification

SAFETY DATA SHEET

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Page E1 of E2

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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.

SODIUM CARBONATE, 0.1 MOLAR (0.2N) SOLUTION Product Synonyms Sodium Carbonate, Water Solution Section 2 Hazards identification Signal word: WARNING Precautionary statement: Pictograms: No symbol required

Target organs: None known **GHS Classification:**

Eye irritation (Category 2B)

GHS Label information: Hazard statement: H320: Causes eye irritation.

P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / information on	ingredients			
Chemical Name		CAS #	%	EINECS	
Water Sodium carbonate		7732-18-5 497-19-8	98.94% 1.06%	231-791-2 207-838-8	
Section 4	First aid measures				

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

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

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

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

Section 5 Fire fighting measures

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

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

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

Section 6 Accidental release measures

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

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

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 prot	ection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

approved respirator.							
Section 9	Physical and chemical pro	perties					
	ata not available. ble. : Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	Flammability (Explosion limi Vapor pressur Vapor density Relative density	tte (Water = 1): <1 solid/gas): Data not ts: Lower / Upper: e (mm Hg): 14 (water (Air = 1): 0.7 (water) (Specific gravity): App Complete in water.	Data not available r)	Auto-igniti Decompos Viscosity: Molecular	•	e: Data not available ure: Data not available. ble. re
Section 10	Stability and reactivity						
	Stable I: Excessive temperatures. Hy	groscopic materia	,				
be produced.	outh other materials: Acids caus	-	liberating gaseous ca	rbon dioxide. When	mixed with lim	e dust and wate	r, corrosive and caustic soda may
	·						
Section 11	Toxicological information				# FO !!		
Skin corrosion/irrita Serious eye damag Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No componen OSHA: No componen OSHA: No componen Ca Prop 65: This pro Reproductive toxici STOT-single expose STOT-repeated exp Aspiration hazard: Potential health effe Inhalation: May be h Ingestion: May caus Skin: May be harmfu Eyes: May cause ey Signs and sympton Additional informat	of this product present at levels t of this product present at levels int of this product present at level duct does not contain any chem ity: Data not available ure: Data not available osure: Data not available Data not available acts: armful if inhaled. May cause res e irritation of the digestive tract. Il if absorbed through skin. May e irritation. s of exposure: Burning sensa ion: RTECS #: VZ4050000 [Source to the sentember of the sentember	greater than or e s greater than or d ls greater than or icals known to the piratory tract irrita May be harmful cause skin irritati tion, cough, whee	qual to 0.1% is identi equal to 0.1% is ident equal to 0.1% is iden e State of California to ation. if swallowed. on. ezing, laryngitis, short	ied as a known or ar ified as probable, po tified as a carcinoge o cause cancer or re	nticipated carci ssible or confir n or potential c productive toxi	nogen by NTP. med human carr arcinogen by OS city.	0
Section 12	Ecological information						
Toxicity to daphnia Toxicity to algae: No Persistence and de Mobility in soil: No Other adverse effec	gradability: No data available data available ts: An environmental hazard ca	es: EC50 - Daphr Bioaccumu PBT and vF	nia magna (Water flea Ilative potential: No PvB assessment: No) - 265 mg/l - 48 h [S data available o data available		ate]	
Section 13	Disposal considerations						
	delines are intended for the or different. Dispose of in acco Transport information						
UN/NA number: Hazard class: No Exceptions: Not	ot applicable Pack	bing name: N ing group: No ERG Guide #	0	Reportable Qua	antity: No	M	arine pollutant: No
Section 15	Regulatory information						
	d to be listed if the CAS number for t						
Compone Sodium carbonate	Int	TSCA Listed	CERLCA (RQ) Not listed	RCRA code Not listed	DSL Not listed	NDSL 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						
							ered by them and must make indepen- s. 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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Page E1 of E2

Section 1

Identification

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Product	POTASSIUM PHOSPHATE, 0.1 MOLAR SOLUTION	
Synonyms	Potassium Phosphate Dibasic, Water Solution	
Section 2	Hazards identification	
Pictograms Target orga GHS Classif Skin irritation Eye irritation GHS Label i H316: Cause	I: WARNING : None required ns: None known fication: n (Category 3) (Category 2B) Information: Hazard statement(s): es mild skin irritation. es eye irritation.	Precautionary statement(s): P264: Wash hands thoroughly after handling. P332+P313: If skin irritation occurs: Get medical attention. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

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

Section 3	Composition / information on	ingredients			
Chemical Name		CAS #	%	EINECS	
Water Potassium phosphate	e, dibasic	7732-18-5 7758-11-4	98.258% 1.742%	231-791-2 231-834-5	
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 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.

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

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low. Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHA-

approved respirator.

		al company and the set					
Section 9	Physical and chemica	al properties					
Odor: No odor. Odor threshold: pH: Data not ava Melting / Freezing po	pint: Approximately 0°C (32°F) (wate proximately 100°C (212°F) (wate	Flammability (s Explosion limits Vapor pressure Vapor density (s r) Relative density (s	te (Water = 1): <1 olid/gas): Data not a s: Lower / Upper: D (mm Hg): 14 (water) Air = 1): 0.7 (water) Specific gravity): Appro Complete in water.	ata not available	Auto-igniti Decompos Viscosity: Molecular		: Data not available Ire: Data not available. ble. e
Section 10	Stability and reactivit	у					
Chemical stabilit Conditions to av	ty: Stable oid: Excessive temperatures		ous polymerization:	Will not occur.			
	with other materials: May r						
•	mposition products: Phosph		5				
Section 11	Toxicological informa	tion					
Acute toxicity: [-	luon					
IARC: No compor OSHA: No compo Ca Prop 65: This	ent of this product present at le nent of this product present at pront of this product present at product does not contain any o xicity: Data not available	levels greater than or e t levels greater than or	equal to 0.1% is identi equal to 0.1% is iden	fied as probable, pos tified as a carcinoger	sible or confir or potential c	med human carc arcinogen by OS	
Aspiration hazar Potential health Inhalation: Data r Ingestion: Ingesti Skin: May cause Eyes: May cause Signs and sympt not available. Exe	exposure: Data not available d: Data not available effects: not available. ion of large doses may cause irritation.	st of our knowledge th	e chemical, physical a	nd toxicological prop	erties have no	t been thorough	ly investigated. Specific data
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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. Form 06/2015

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE[®] by Aldon 221 Rov Avon, N

"Cutting edge science for the classroom"

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

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

CALCIUM ACETATE, 0.1 MOLAR SOLUTION Product Synonyms Calcium Acetate, Water Solution Section 2 Hazards identification Signal word: WARNING Precautionary statement: Pictograms: GHS07 P261: Avoid breathing mist/vapours/spray. Target organs: None known P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection. 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. GHS Classification: P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for Skin irritation (Category 2) breathing. Eye irritation (Category 2A) P312: Call a POISON CENTER or doctor if you feel unwell. STOT-SE (Category 3) P332+P313: If skin irritation occurs: Get medical attention. P337+P313: If eye irritation persists: Get medical attention. GHS Label information: Hazard statement: P362+P364: Take off contaminated clothing and wash it before reuse. H315: Causes skin irritation. P403+P233: Store in a well-ventilated place. Keep container tightly closed. H319: Causes serious eye irritation. P405: Store locked up. H335: May cause respiratory irritation. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

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

Section 3	Composition / information on	Composition / information on ingredients				
Chemical Name		CAS #	%	EINECS		
Water Calcium acetate		7732-18-5 5743-26-0	98.418% 1.582%	231-791-2 200-540-9		
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: 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.

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

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

Section 8	Exposure controls / personal protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Linits.	Particles not otherwise classified	Not established	TWA: 15 mg/m ³ total dust	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 and chen						
• • • •	Data not available. lable. int: Approximately 0°C (32°F) (roximately 100°C (212°F) (v	(water) Flamma Explosi Vapor p Vapor d Relative	tion rate (Water = 1): <1 billty (solid/gas): Data no on limits: Lower / Upper: ressure (mm Hg): 14 (wat ensity (Air = 1): 0.7 (water lensity (Specific gravity): Apl y(ies): Complete in water.	Data not available er))	Auto-ignit Decompos Viscosity: Molecular		e: Data not available ure: Data not available. ble. re
Section 10	Stability and react	ivity					
Chemical stability Conditions to avo	 r: Stable bid: Excessive temperatu 		azardous polymerization: aporation.	Will not occur.			
ncompatible mate	erials: Strong oxidizers,	strong acids.					
Hazardous decom	nposition products: Oxi	ides of carbon.					
Section 11	Toxicological infor	rmation					
Carcinogenity: Da NTP: No component IARC: No component OSHA: No component Ca Prop 65: This p Reproductive toxi	ent of this product present ent of this product presen nent of this product prese	at levels greater th t at levels greater t nt at levels greater any chemicals know	an or equal to 0.1% is ident han or equal to 0.1% is ider than or equal to 0.1% is ide n to the State of California	tified as probable, pos ntified as a carcinoge	sible or confi n or potential	rmed human card carcinogen by OS	• •
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Page E1 of E2

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.

SODIUM SILICATE, 0.1 MOLAR SOLUTION Product Synonyms Sodium Silicate, Water Solution Section 2 Hazards identification Signal word: DANGER Precautionary statement: Pictograms: GHS05 / GHS07 P260: Do not breathe mist/vapours/spray. Target organs: Eyes, Skin, Mucous membranes P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. GHS Classification: P363: Wash contaminated clothing before reuse. Skin corrosion (Category 1B) P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for STOT-SE (Category 3) breathing P310: Immediately call a POISON CENTER or doctor. GHS Label information. Hazard statement: P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove H314: Causes severe skin burns and eye damage. contact lenses, if present and easy to do. Continue rinsing. H335: May cause respiratory irritation. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P405: Store locked up. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Hazards not otherwise classified:

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

Section 3 Composition /	information on ingredients			
Chemical Name	CAS #	%	EINECS	
Water Sodium metasilicate, pentahydrate	7732-18-5 10213-79-3	97.88% 2.12%	231-791-2 229-912-9	
Section 4 First aid measu	ures	1		

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

INHALATION: MAY 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 DAMAGE. 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 SEVERE SKIN BURNS. 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 protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Linits.	Sodium metasilicate	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/MSHAnirator wodr

approved respirator.							
Section 9	Physical and chemical pro	perties					
Appearance: Clear, Odor: No odor. Odor threshold: Da pH: Data not availab Melting / Freezing point:	colorless liquid. ta not available. le. Approximately 0°C (32°F) (water) timately 100°C (212°F) (water)	Evaporation ra Flammability (Explosion limi Vapor pressur Vapor density Relative density	te (Water = 1): <1 solid/gas): Data not : ts: Lower / Upper: E e (mm Hg): 14 (water (Air = 1): 0.7 (water) (Specific gravity): Appr Complete in water.	Data not available r)	Auto-ignitio Decomposi Viscosity: Molecular f		: Data not available Ire: Data not available. ble. re
Section 10	Stability and reactivity				1		
Incompatible mater		ls and acid fume nay be produced	l on prolonged contac	t with metals such as		, lead and zinc.	Decomposed by acids.
Section 11	Toxicological information						
Skin corrosion/irrita Serious eye damage Respiratory or skin Germ cell mutageni Carcinogenity: Dat NTP: No component IARC: No component OSHA: No component Ca Prop 65: This pro Reproductive toxici STOT-single exposed STOT-repeated exp Aspiration hazard: Potential health effet Inhalation: May caus Ingestion: Harmful if Skin: Causes severe Eyes: Causes seve d Signs and symptom Exercise appropriate Additional informat	of this product present at levels t of this product present at levels t of this product present at levels duct does not contain any chemic ty: Data not available ure: The substance or mixture is osure : Data not available Data not available bats : se respiratory irritation. May caus swallowed. May cause burns to a skin burns. amage . Is of exposure : Causes vomitin procedures to minimize potential ion: RTECS #: Sodium metasi	in-human: 250 r e greater than or e greater than or s greater than or cals known to th classified as sp digestive tract. g, diarrhea, sev hazards.	equal to 0.1% is identif equal to 0.1% is ident equal to 0.1% is ident e State of California to ecific target organ tox iratory tract. Over-exp ere irritation, and tissu	ified as probable, po tified as a carcinoge o cause cancer or re icant, single exposu posure may result in	ssible or confiri n or potential c productive toxic re, category 3 v lung tissue dar	med human care arcinogen by O city. vith respiratory e nage.	SHA.
Section 12	Ecological information						
Toxicity to daphnia Toxicity to algae: No Persistence and deg Mobility in soil: No	g radability: No data available data available ts: An environmental hazard car	s: Sodium meta Bioaccumu PBT and vi	asilicate: Daphnia ma Ilative potential: No PvB assessment: No	gna (Crustacea), EC data available o data available	Ū	/100 hours	
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	delines are intended for the di different. Dispose of in accor Transport information						
	Packing gr ited quantity equal to or less	oup: III	•	Disodium trioxosil able Quantity: No RG Guide # 154	,	Ma	arine pollutant: No
Section 15	Regulatory information						
	d to be listed if the CAS number for th	e anhydrous form TSCA	is on the Inventory list.	RCRA code	DSL	NDSL	CA Prop 65
Compone Sodium metasilicate	лк	Listed	Not listed	Not listed	Not 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						
							ered by them and must make indepen- s. 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

Section 1

Identification

SAFETY DATA SHEET

GENERAL STORAGE CODE GREEN

Page E1 of E2

INNOVATING SCIENCE® by Aldon 221 Roo

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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	ALUMINUM SULFATE, 0.1 MOLAR SOLUTION	
Synonyms	Aluminum Sulfate, Aqueous Solution	
Section 2	Hazards identification	
Signal word	: WARNING	Precautionary sta

Pictograms: No symbol required Target organs: None known

GHS Classification:

Serious eye irritation (Category 2B)

GHS Label information: Hazard statement: H320: Causes eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical attention.

Hazards not otherwise classified:

Health hazards not otherwise classified (HHNOC) - Not Known

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3	Composition / information on ingredients					
Chemical Name		CAS #	%	EINECS		
Water Aluminum sulfate		7732-18-5 17927-65-0	96.58% 3.42%	231-791-2 233-135-0		
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 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. Fire or excessive heat above 760°C (1400°F), may produce hazardous decomposition products of toxic and corrosive gases, Sulfur trioxide and Aluminum oxide. Sulfur trioxide is an oxidizing agent which supports combustion and will react with water to form Sulfuric acid.

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 protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Linits.	Aluminum sulfate	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 respirat	101.						
Section 9	Physical and chen	nical properties					
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 (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 r)	Auto-igniti Decompos Viscosity: Molecular		: Data not available Ire: Data not available. ble. re
Section 10	Stability and react	ivity					
	void: Excessive temperatu	res which cause evapora	ous polymerization: tion.	Will not occur.			
•	aterials: Oxidizing agents.						
Hazardous deco	mposition products: Sul	fur trioxide and aluminum	oxide.				
Section 11	Toxicological info	rmation					
Germ cell mutac Carcinogenity: NTP: No compon IARC: No compon OSHA: No compo Ca Prop 65: This Reproductive to STOT-single exp	skin sensitization: Data n genicity: Data not availabl Data not available nent of this product present onent of this product present onent of this product prese product does not contain a oxicity: Data not available	e at levels greater than or e t at levels greater than or nt at levels greater than o any chemicals known to th	equal to 0.1% is ident r equal to 0.1% is iden	ified as probable, po ntified as a carcinoge	ssible or confir n or potential o	med human card carcinogen by OS	0,
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ERG: Emergency Response Guidebook.

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE

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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.

SILVER NITRATE, 0.1 MOLAR (0.1 NORMAL) SOLUTION Product Synonyms Silver(I) Nitrate, Water Solution / Silver Nitrate, 0.1M (0.1N) Solution Section 2 Hazards identification Precautionary statement(s): Signal word: WARNING Pictograms: GHS07 / GHS09 P264: Wash hands thoroughly after handling Target organs: Kidneys, Liver P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P332+P313: If skin irritation occurs: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove **GHS Classification:** contact lenses, if present and easy to do. Continue rinsing. Skin irritation (Category 2) P337+P313: If eye irritation persists: Get medical attention. Eye irritation (Category 2A) P391: Collect spillage. Aquatic Acute (Category 1) P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations. GHS Label information: Hazard statement: H315: Causes skin irritation. H319: Causes serious eye irritation. H400: Verv toxic to aquatic life.

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 Silver nitrate		7732-18-5 7761-88-8	98.3% 1.7%	231-791-2 231-853-9	
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: CONTACT CAUSES SEVERE 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: CONTACT 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: 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.

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.

Section 8	Exposure controls / personal protection					
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)		
Exposure Limits.	Silver, soluble compounds, as Ag	TWA: 0.01 mg/m ³	TWA: 0.01 mg/m ³	TWA: 0.01 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/MSHA-

approved respirato							
Section 9	Physical and chemic	cal properties					
	xteristic odor. Data not available. lable. nt: Approximately 0°C (32°F) (wa roximately 100°C (212°F) (wa	Flammability (Explosion limi Vapor pressur Vapor density Relative density	ate (Water = 1): <1 solid/gas): Data not ts: Lower / Upper: 1 e (mm Hg): 14 (wate (Air = 1): 0.7 (water) (Specific gravity): App : Complete in water.	Data not available r)	Auto-ignit Decompo Viscosity: Molecular		: Data not available Ire: Data not available. ble. re
Section 10	Stability and reactiv	ity					
Chemical stability Conditions to avo	 r: Stable rid: Excessive temperature 		us polymerization:	Will not occur.			
Incompatible mate	erials: Combustible materi	als, reducing agents, or	ganic substances, stro	ong basis and alkalis			
Hazardous decom	nposition products: Nitrog	gen oxides.					
Section 11	Toxicological inform	nation					
IARC: No compone OSHA: No compon Ca Prop 65: This p Reproductive toxi	ent of this product present at ent of this product present a ment of this product present product does not contain any	at levels greater than or at levels greater than o	equal to 0.1% is ident equal to 0.1% is iden	ified as probable, po ntified as a carcinoge	sible or confi n or potential	rmed human card carcinogen by OS	0,
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ERG: Emergency Response Guidebook.

Form 06/2015

GENERAL STORAGE CODE GREEN

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE

"Cutting edge science for the classroom"

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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.

ZINC SULFATE, 0.1 MOLAR SOLUTION Product Synonyms Zinc Sulfate, Water Solution Section 2 Hazards identification Signal word: WARNING Precautionary statement: Pictograms: GHS09 P264: Wash hands thoroughly after handling. Target organs: None known P312: Call a POISON CENTER or doctor if you feel unwell. 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. P273: Avoid release to the environment. P391: Collect spillage. GHS Classification: P501: Dispose of contents/container to a licensed chemical disposal agency in Acute toxicity, oral (Category 5) accordance with local/regional/national regulations. Eye irritation (Category 2B) Aquatic acute (Category 1) Aquatic chronic (Category 1) GHS Label information: Hazard statement: H303: May be harmful if swallowed. H320: Causes eye irritation. H410: Very toxic to aquatic life with long lasting effects.

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 Zinc sulfate, heptah	ıydrate	7732-18-5 7446-20-0	97.2% 2.8%	231-791-2 231-793-3 (anhydrous)	
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 SEVERE 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: 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 prot	ection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Particles not otherwise classified	Not established	TWA: 15 mg/m ³ total dust	Not established

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

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

Section 9	Physical and chemical	l properties					
	Data not available. int: Approximately 0°C (32°F) (water roximately 100°C (212°F) (water	Flammability (Explosion limi Vapor pressur Vapor density Relative density	ate (Water = 1): <1 solid/gas): Data not ts: Lower / Upper: I e (mm Hg): 14 (wate (Air = 1): 0.7 (water) (Specific gravity): App : Complete in water.	Data not available r)	Auto-ignit Decompos Viscosity: Molecular		: Data not available Ire: Data not available. ble. re
Section 10	Stability and reactivity						
Chemical stability Conditions to avo	/: Stable ild: Temperatures above 250°		us polymerization:	Will not occur.			
Incompatible mat	erials: Strong oxidizers and s	strong bases.					
Hazardous decon	nposition products: Zinc oxi	des and sulfur oxides					
Section 11	Toxicological informat	ion					
Germ cell mutage Carcinogenity: D NTP: No compone IARC: No compone OSHA: No compor Ca Prop 65: This p Reproductive tox STOT-single expo STOT-repeated exp	in sensitization: Data not av enicity: Data not available lata not available nt of this product present at le ent of this product present at le nent of this product present at roduct does not contain any c icity: Data not available spure: Data not available cposure: Data not available	vels greater than or e evels greater than or levels greater than or	equal to 0.1% is identi equal to 0.1% is iden	ified as probable, pos tified as a carcinogen	sible or confin or potential of	med human card carcinogen by OS	o ,
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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.

CORROSIVE STORAGE CODE WHITE

Page E1 of E2

Section 1

Product Synonyms

Section 2

Identification

INNOVATING SCIENCE "Cutting edge science for the classroom"

Potassium Hydroxide, Water Solution

Hazards identification

POTASSIUM HYDROXIDE, 0.1 MOLAR (0.1 NORMAL) SOLUTION

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.

Pictograms: GHS07 Target organs: None known. GHS Classification:

Acute toxicity (Category 5) Skin irritation (Category 2) Eye irritation (Category 2A)

Signal word: WARNING

GHS Label information: Hazard statement:

- H303: May be harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P302+P352: IF ON SKIN: Wash with plenty of water and soap. P312: Call a POISON CENTER or doctor if you feel unwell. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 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. P362+P364: Take off contaminated clothing and wash it before reuse.

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 hydroxide		7732-18-5 1310-58-3	99.43% 0.57%	231-791-2 215-181-3	
Section 4	First aid measures				

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

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

EYE CONTACT: CAUSES EYE DAMAGE. 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 SKIN BURNS. 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.

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 prot	ection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Linits.	Potassium hydroxide	STEL: C 2mg/m ³	None established	STEL: C 2mg/m ³

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

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

Section 9 Physical and chemical pro	operties	
Appearance: Clear, colorless liquid. Odor: No odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: ~0°C (32°F) (water) Boiling point: ~100°C (212°F) (water) Flash point: Data not available.	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available. Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.1 Solubility(ies): Complete in water.	Partition coefficient: (n-octanol / water): Data not available. Auto-ignition temperature: Data not available. Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture
Section 10 Stability and reactivity		

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Acids, aluminum, halogens, nitro compounds, organic materials, acid chlorides, acid anydrides, magnesium, copper, tin and zinc.

Hazardous decomposition products: Hydrogen gas in contact with metals.

Section 11 **Toxicological information**

Acute toxicity: Oral-rat LD50: 365 mg/kg (IUCLID dataset) [Potassium hydroxide] Skin corrosion/irritation: Skin-rabbit - Corrosive Serious eye damage/irritation: Eyes-rabbit - Corrosive 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 by inhalation. Ingestion: Harmful by ingestion. Skin: Contact with skin causes burns. Eyes: Contact causes damage. Signs and symptoms of exposure: Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting Additional information: RTECS #: TT2100000 [Potassium hydroxide] Section 12 Ecological information Toxicity to fish: Gambus affinis (fish, fresh water), LC50 = 85 mg/l/24 hours [Potassium hydroxide] 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

Disposal considerations Section 13

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
Exceptions: Not applicable	2020 ERG Guide # Not applicable

Reportable Quantity: No

Marine pollutant: No

Section 15 **Regulatory information**

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Potassium hydroxide	Listed	Listed	D002, D003	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

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

CORROSIVE STORAGE CODE WHITE

Page E1 of E2

Section 1

Identification

"Cutting edge science for the classroom" by Aldon "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.

FERROUS CHLORIDE, 0.1 MOLAR SOLUTION Product Synonyms Iron(II) Chloride, Water Solution / Unknown Solution Section 2 Hazards identification Signal word: WARNING Precautionary statement: Pictograms: GHS05 / GHS07 P234: Keep only in original container. Target organs: Cardiovascular and central nervous systems, liver, kidneys P264: Wash hands thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection. P390: Absorb spillage to prevent material damage. P406: Store in corrosive resistant container with a resistant inner liner. P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. GHS Classification: P337+P313: If eye irritation persists: Get medical attention. Corrosive to metals (Category 1) Eye damage (Category 2A) GHS Label information. Hazard statement: H290: May be corrosive to metals. H319: Causes serious eye irritation.

Hazards not otherwise classified:

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

Section 3 Co	omposition / information on	ingredients		
Chemical Name		CAS #	%	EINECS
Water Ferrous chloride, tetrahyd	drate	7732-18-5 13478-10-9	98.02% 1.98%	231-791-2 231-843-4 [Iron dichloride CAS # 7758-94-3]
Section 4 Fi	rst 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 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: Remove contaminated clothing. Flush thoroughly with mild scap 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 prot	ection		
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits.	Iron salts, soluble, as Fe	TWA: 1 mg/m ³	No listing	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 misty conditions prevail, work in fume hood or wear a NIOSH/MSHAnirator wodr

Section 9	Physical and chemical pro	perties					
	ata not available. ble h: Approximately 0°C (32°F) (water) ximately 100°C (212°F) (water)	Flammability Explosion lim Vapor pressur Vapor density Relative density	ate (Water = 1): <1 (solid/gas): Data not a its: Lower / Upper: Data re (mm Hg): 14 (water) (Air = 1): 0.7 (water) (Specific gravity): Appro- : Complete in water.	ata not available	Auto-igniti Decompos Viscosity: Molecular		e: Data not available ure: Data not available. ble. re
Section 10	Stability and reactivity						
Incompatible mater	Stable d: Excessive temperatures which rials: Strong oxidizing agents, m position products: Hydrogen ga	n cause evapora etals, strong bas	ses, reducing agents, al				
Section 11	Toxicological information						
Germ cell mutagen Carcinogenity: Dat NTP: No component IARC: No component OSHA: No component	t of this product present at levels at of this product present at levels ant of this product present at leve ity: Data not available	greater than or e greater than or	equal to 0.1% is identifi	ed as probable, pos	sible or confir	med human card	
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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. Form 06/2015

GENERAL STORAGE CODE GREEN

Page E1 of E2

Section 1

Identification

INNOVATING SCIENCE® by Aldon 221 Rov Avon, W

"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	MAGNESIUM SULFATE, 0.1 MOLAR SOLUTION				
Synonyms	Magnesium Sulfate, Water Solution				
Section 2	Hazards identification				
This substa to the Glob Chemicals. Signal worr Pictograms Target orga GHS Classi GHS Label	ance or mixture has not been classified as hazardous according hally Harmonized System (GHS) of Classification and Labeling of	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.			

Physical hazards not otherwise classified (PHNOC) - Not Known

Section 3 Composition / information on ingredients					
Chemical Name		CAS #	%	EINECS	
Water Magnesium sulfate	, heptahydrate	7732-18-5 10034-99-8	97.54% 2.46%	231-791-2 231-298-2	
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: 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: 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.

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

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

Section 8	Exposure controls / personal protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Linits.	Magnesium sulfate	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	Section 9 Physical and chemical properties							
Appearance: Clear, colorless liquid. Odor: No odor. Odor threshold: Data not available. pH: Data not available Melting / Freezing point: Approximately 0°C (32°F) (water) Boiling point: Approximately 100°C (212°F) (water)		Flammability (so Explosion limits Vapor pressure Vapor density (A Relative density (S	Evaporation rate (Water = 1): <1 Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): Approximately 1.0 (water) Solubility(ies): Complete in water.			Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture		
Section 10	Stability and reactivity							
Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Excessive temperatures which cause evaporation. Incompatibilities with other materials: None known. Hazardous decomposition products: Sulfur dioxide and sulfur trioxide. Sulfur dioxide and sulfur trioxide.								
Section 11	Toxicological informati	on						
Serious eye damage Respiratory or skin Germ cell mutageni Carcinogenity: Data NTP: No component IARC: No component OSHA: No component Ca Prop 65: This pro Reproductive toxici STOT-single expost STOT-repeated expo Aspiration hazard: Potential health effe Inhalation: May be h Ingestion: May be h Ingestion: May be mil Eyes: May cause mil Eyes: May cause mil Signs and symptom not available. Exerci	Ation: Data not available a/irritation: Data not available sensitization: Data not available sensitization: Data not available city: Data not available of this product present at leve t of t of this product present at le	ailable rels greater than or e vels greater than or evels greater than or emicals known to the of our knowledge the ominimize potential f	equal to 0.1% is ident equal to 0.1% is iden s State of California to e chemical, physical a	ified as probable, pos tified as a carcinoger o cause cancer or rep	sible or confirr n or potential c roductive toxic	med human carc arcinogen by OS bity.		
		allable						
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 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								
	different. Dispose of in a Transport information							
UN/NA number:Not applicableShipping name:Not RegulatedHazard class:Not applicablePacking group:Not applicableReportable Quantity:NoExceptions:Not applicable2020 ERG Guide #Not applicableReportable Quantity:No						rine pollutant: No		
Section 15	Regulatory information							
	to be listed if the CAS number	•			Del	NDO	CA Dr-= 65	
Compone Magnesium sulfate	n	Listed	CERLCA (RQ) Not listed	RCRA code Not listed	DSL Listed	NDSL 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							
							ered by them and must make indepen- s. NTP: National Toxicology Program,	

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.