SAFETY DATA SHEET

SDS No.: CC0550

GENERAL STORAGE CODE GREEN

Section 1 Chemical Product and Company Information



221 Rochester Street Avon, NY 14414 (585) 228-6177

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

Product

COPPER(II) SULFATE, PENTAHYDRATE

Synonyms

Cupric Sulfate, 5-Hydrate

Hazards Identification

Signal word: WARNING Pictograms: GHS07 / GHS09

Target organs: Liver, Kidneys, Lungs, Spleen.



GHS Classification: Acute toxicity-oral (Category 4) Skin imitation (Category 2) Eye irritation (Category 2A) Aquatic acute toxicity (Category 1) Aquatic chronic toxicity (Category 1)

GHS Label information: Hazard statement:

H302: Harmful if swallowed. H315: Causes skin irritation. H319: Causes serious eye irritation. H410: Very toxic to aquatic life with long lasting effects. Precautionary statement:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 3 Composition	Information on Ingredients		Application of the second of t
Chemical Name	CAS#	%	EINECS
Cupric sulfate	7758-99-8	>99%	231-847-6 (anhydrous)
Section 4 First Aid Meas	ures		

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomitting 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 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.

Section 6 Accidental Release Measures

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

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

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

Section 7 Handling & Storage

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

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

Section 8 Exposure Controls / Personal Protection

Exposure Limits: Chemical Name ACGIH (TLV) OSHA (PEL) NIOSH (REL) Copper, dusts and mists, as Cu TWA: 1 mg/m^3 TWA: 1 mg/m^3 TWA: 1 mg/m^3

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

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

Section 9 Physical & Chemical Properties

Appearance: Blue, crystalline solid Odor: Odorless

Odor threshold: Data not available pH: 3.7-4.2 (10% solution)
Melting / Freezing point: 150°C (302°F)

Melting / Freezing point: 150°0 Boiling point: Decomposes Flash point: Non-flammable Evaporation rate (= 1): Not applicable Flammability (solid/gas): Not applicable Explosion limits: Lower / Upper: Not applicable Vapor pressure (mm Hg): 20 torr @ 22.5°C Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 2.284 Solubility(ies): 31.6 g/100 ml water @ 0°C Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: 560°C (1040°F)

Viscosity: Data not available. Molecular formula: CuSO₄·5H₂O Molecular weight: 249.68

Section 10 Stability & Reactivity

Chemical stability: Stable

Hazardous polymerization: Will not occur.

Conditions to avoid: Hygroscopic malerial. Stable when kept dry, under normal temperature and pressure. Avoid high temperatures, exposure to air and incompatible materials.

Incompatible materials: Reducing agents, acetylene or nitromethane, magnesium, strong bases, alkalines, phosphates, hydrazine, zirconium. Can corrode aluminum, steel and iron.

Hazardous decomposition products: Oxides of sulfur and copper fumes

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 300 mg/kg [Copper sulfate anhydrous] Skin corrosion/irritation: Data not available

Skin corrosion/irritation: Data not available
Serious eye damage/irritation: Data not available
Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: May cause irritation to the mucous membranes and upper respiratory tract.

Ingestion: Ingestion can cause irritation to the digestive tract and abdominal pain.

Skin: Contact with skin causes slight irritation. Excessive exposure may cause allergic dermatitis. May cause irritation or burns on wet skin.

Eyes: Can cause severe irritation and may result in irreversible eye damage.

Signs and symptoms of exposure: Note to physician: Probable mucosal damage may contradict the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed. Wilson's disease can be aggravated by excessive exposure. Symptoms include nausea, vomiting, gastrointestinal pain, diarrhea, dizziness, jaundice, and general debility.

Additional information: RTECS #: GL8900000

Section 12 Ecological Information

Toxicity to fish: Salmo gairdneri (fish, estuary, fresh water), LC50 = < 0.75-0.84 mg/L [Copper sulfate anhydrous]

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

Bioaccumulative potential: No data available PBT and vPvB assessment: No data available

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

Section 13 Disposal Considerations

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

Section 14 Transport Information

UN/NA number: UN3077 Shipping name: Environmentally hazardous substances, solid, n.o.s., (Cupric sulfate)

Hazard class: 9 Packing group: III Reportable Quantity: 10 lbs (4.54 kg) Marine pollutant: Yes

Exceptions: Non regulated equal to or less than 4.539 Kg; Reportable quantity equal to or more than 4.54 Kg 2012 ERG Guide # 171

Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Cupric sulfate	Listed	10 lbs (4.54 kg)	Not listed	Not listed	Not listed	D2B

Section 16 Additional 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.

Revision Date: November 9, 2012 Supercedes: January 1, 2012

PN: 96-3043 REV 003

SDS No.: AA0195

Section 1 Chemical Product and Company Information



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

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

Product

ALUMINUM POTASSIUM SULFATE

Synonyms

Potassium Alum / Alum

Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: WARNING Pictograms: GHS07 Target organs: Liver, Kidneys



GHS Classification: Acute toxicity, oral (Category 4) Skin imitation (Category 2) Eye irritation (Category 2B)

GHS Label information: Hazard statement: H302: Harmful if swallowed. H315+H320: Causes skin and eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear protective gloves/protective clothing/eye protection/face protection. P301+P330+P312: IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention.

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

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

hemical Name	CAS#	%	EINECS	
luminum potassium sulfate	7784-24-9	100%	233-141-3	
		1		
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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: 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: CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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

Specific Hazards: 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.

Accidental Release Measures

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

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

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

Section 7 Handling & Storage

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

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

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name ACGIH (TLV) OSHA (PEL) NIOSH (REL)

Aluminum, metal and insoluble compounds TWA: 1 mg/m³ Respirable fraction TWA: 5 mg/m³ Respirable fraction TWA: 5 mg/m³ Respirable fraction

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

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

Section 9 Physical & Chemical Properties

Appearance: Solid. White crystals or powder.

Odor: No odor.

Odor threshold: Data not available.

pH: 3.5 (1% solution)

Melting / Freezing point: Loses H2O at 93°C (199°F)

Boiling point: Data not available Flash point: Data not available

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 1.97 Solubility(ies): Moderately soluble in water. Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available

Viscosity: Data not available. Molecular formula: AlK(SO₄)₂•12H₂O

Molecular weight: 474.39

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur

Conditions to avoid: Excessive temperature and heat,

Incompatible materials: Aluminum, copper, steel, zinc, strong oxidizing agents.

Hazardous decomposition products: Oxides of sulfur, aluminum oxide, oxides of potassium.

Section 11 Toxicological Information

Acute toxicity: Data not available

Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Ingestion: Harmful if swallowed. Ingestion of large amounts may cause gastrointestinal irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Eyes: Causes eye imitation. May cause chemical conjunctivitis.

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Additional information: RTECS #: WS5690000

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

Bioaccumulative potential: No data available PBT and vPvB assessment: No data available

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

Section 13 Disposal Considerations

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

Section 14 Transport Information

UN/NA number: Not applicable

Hazard class: Not applicable

Shipping name: Not Regulated
Packing group: Not applicable

Packing group: Not applicable Reportable Quantity: No 2012 ERG Guide # Not applicable

Marine pollutant: No

Exceptions: Not applicable 2013 Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Aluminum potassium sulfate (CAS # 10043-67-1)	Listed	Not listed	Not listed	Listed	Not listed	D2B
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Section 16 Additional 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, REG: Emergency Resoonse Guidebook.

Revision Date: October 21, 2013 Supercedes: February 22, 2011

PN: 96-3259 REV 005

SDS No.: HH0091

SAFETY DATA SHEET

CORROSIVE STORAGE CODE WHITE

Section 1 Chemical Product and Company Information Page E1 of E2



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

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

Product

HYDROCHLORIC ACID, 0.01 MOLAR (0.01 NORMAL) SOLUTION

Synonyms Muriatic Acid, Water Solution : Hydrogen Chloride, Water Solution

Section 2 Hazards Identification The dilution of this chemical has not been classified according to the Globally Harmonized System (GHS) of Classification and Labeling of

Signal word: WARNING Pictograms: None required

Target organs: Respiratory system, skin, eyes, lungs.

GHS Classification: Skin irritant (Category 3) Eye irritant (Category 2B)

GHS Label information Hazard statement(s): H316: Causes mild skin irritation H320: Causes eye irritation.

Precautionary statement(s):
P264: Wash hands thoroughly after handling.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313: If skin irritation occurs: Get medical attention.

P337+P313: If eye irritation persists: Get medical attention

Ca Prop 65: This product does not contain any chemicals known to the State of California to cause cancer or reproductive toxicity.

Section 3 Composition / Inform	nation on ingredients :-			
Chemical Name	CAS#	% :	EINECS	
Water	7732-18-5	99,970%	231-791-2	
Hydrochloric acid	7647-01-0	0.032%	231-595-7	

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel.

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

Section 9

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam

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

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Contact with metals produce hydrogen, which is flammable and may produce explosive mixtures with air.

Section 6 Accidental Release Measures

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

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

Containment and Cleanup: Neutralize spill with sodium bicarbonate or calcium hydroxide, absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water

Section 7 Handling & Storage Page E2 of E2 Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale 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 Limite: Chemical Name ACGIH (TLV) OSHA (PEL) NIOSH (REL) Exposure Limits: STEL: C 2 ppm / C 2.98 mg/m³ STEL: C 5 ppm / C 7 mg/m³ STEL: C 5 ppm / C 7 mg/m³ Hydrogen chloride Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low. Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator Section 9: Physical & Chemical Properties Appearance: Clear, colorless liquid. Evaporation rate (= 1): Data not available. Flammability (solid/gas): Data not available. Explosion limits: Upper/Lower: Data not available. Partition coefficient: (n-octanol / water): Data not available. Odor: Pungent odor.
Odor threshold: Data not available. Auto-ignition temperature: Data not available. Decomposition temperature: Data not available expression imits. UpperLower: Data for avail Vapor pressure (mm Hg): 14 (water) Vapor density (Air = 1): 0.7 (water) Relative density (Specific gravity): 1.0 [water] Solubility(ies): Soluble in water. pH: N/A
Melting / Freezing point: Approx. 0°C (32°F) [water]
Boiling point: Approx. 100°C (212°F) [water]
Flash point: Not flammable. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture Section:10: Stability & Reactivity. Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: Containers may burst when heated. Avoid contact with water. Incompatible materials: Metals, bases, active metals, alkali metals, oxidizing agents, hydroxides, amines, carbonates, cyanides, sulfides, sulfites, Hazardous decomposition products: Hydrogen chloride gas. Section 11 Toxicological Information Acute toxicity: Data not available Skin corrosion/irritation: Data not available at this dilution. Serious eye damage/irritation: Data not available at this dilution. 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 carcinogen or potential carcinogen by NTP. IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity: Data not available STOT-single exposure: Data not available at this dilution. STOT-repeated exposure: Data not available Aspiration hazard: Data not available Potential health effects: To the best of our knowledge the chemical, physical and toxicological properties have not been thoroughly investigated. Specific data is not available. Exercise appropriate procedures to minimize potential hazards. Inhalation: May be harmful if inhaled. Material may cause irritation to the tissue of the mucous membranes and upper respiratory tract. Skin: May cause irritation Eyes: May cause irritation. Toxicity to fish: LC50 - Gambusia affinis (Mosquito fish) - 282 mg/l - 96 h (Hydrochloric acid) 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 Bioaccumulative potential: 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 guidefines are intended for the disposal of caladop-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

Section 14 Transport Information. UN/NA number: Not applicable Shipping name: Not Regulated Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No 2012 ERG Guide # Not applicable Exceptions: Not applicable Section 15. Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the inventory list. Component TSCA CERLCA (RQ) DSL NDSI WHMIS Classification RCRA code Hydrochloric acid, glacial Listed Not listed D002 Listed Not listed € E Section 16 Additional information 22 The information contained herein is turnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make inder 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 2015; Spedic Target Organ Toxicity, SE: Single Exposure, Ex-Repeated Exposure, Ex-R

PN 96-3010 REV 004

Revision Date: May 23, 2014

Supercedes: May 23, 2014

SAFETY DATA SHEET

GENERAL STORAGE CODE GREEN

Chemical Product and Company Identification

Page E1 of E2



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

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

Product

SODIUM CHLORIDE

Synonyms Common Salt / Rock Salt

Hazards Identification

This substance or mixture has not been classified as hazardous according to the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals.

Signal word: Not classified Pictograms: Not classified Target organs: None known

GHS Classification: Not classified

GHS Label information: Hazard statement(s): Not classified

Precautionary statement(s): Not classified

Supplementary information:

Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Get medical attention if you feel unwell.

Ca Prop 65 - This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

hemical Name	CAS#	%	EINECS	
odium chloride	7647-14-5	100%	231-598-3	
		:		

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

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

Section 5 Fire Fighting Measures

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

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

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

Section 6 Accidental Release Measures

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

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

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

Section 7 Handling & Storage Page E2 of E2

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

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

Section 8 Exposure Controls / Personal Protection

Exposure Limits: Chemical Name ACGIH (TLV) OSHA (PEL) NIOSH (REL)
Sodium chloride None established None established None established

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

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

Section 9 Physical & Chemical Properties

Appearance: Solid, white crystals.

Odor: No odor.

Odor threshold: Data not available.

pH: 4.0-9.0

Melting / Freezing point: 801°C (>1473°F) Boiling point: 1465°C (2669°F)

Flash point: Non combustible

Evaporation rate (= 1): Data not available Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): 2.4

Vapor density (Air = 1): Data not available Relative density (Specific gravity): 2.16 @ 25°C Solubility(ies): 1 g/2.8 ml water at 25°C Partition coefficient: Data not available
Auto-ignition temperature: Data not available
Decomposition temperature: Data not available

Viscosity: Data not available. Molecular formula: NaCl Molecular weight: 58.45

Section 10 Stability & Reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur

Conditions to avoid: Wet conditions can cause caking and/or corrosion.

Incompatible materials: Strong acids

Hazardous decomposition products: Electrolysis can produce chlorine gas.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 3000 mg/kg Skin corrosion/irritation: Data not available Serious eye damage/irritation: Data not available Respiratory or skin sensitization: Data not available

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Data not available STOT-single exposure: Data not available STOT-repeated exposure: Data not available Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation of dust leaves salty taste with mild irritation to mucous membrane in nose and throat.

Ingestion: Ingestion of large amounts (more than 0.1 pound) may cause vomiting.

Skin: Contact may cause very slight irritation. Eyes: Contact may cause very slight irritation.

Signs and symptoms of exposure: Gross overexposure over a long period of time, results in dehydration.

Additional information: RTECS #: VZ4725000

Section 12 Ecological Information

Toxicity to fish: Lepomis macrochirus (fish, freshwater) LC50: 9,675 mg/l/96 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: 6,175 mg/l/16 hours

Toxicity to algae: Anabaena variabilis (Algae) LC50: 23,565 mg/l/4 day

Persistence and degradability: No data available

Mobility in soil: No data available

Bioaccumulative potential: No data available PBT and vPvB assessment: No data available

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

Section 13 Disposal Considerations

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

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable Hazard class: Not applicable

Shipping name: Not Regulated Packing group: Not applicable

Reportable Quantity: No

Marine pollutant: No

Exceptions: Not applicable

2012 ERG Guide # Not applicable

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Section 15 Regulatory Information

A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

Component TSCA CERLCA (RO)

Component TSCA CERLCA (RQ) RCRA code DSL NDSL

Sodium chloride Listed Not listed Not listed Listed Not listed

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.