Identification Section 1

INNOVATING SCIENCE

'Cutting edge science for the classroom'

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

OCEAN SALTS, SIMULATED Product

Synonyms

Section 2 Hazards identification

Signal word: DANGER Pictograms: GHS05 / GHS07 Target organs: Liver, Kidneys, Blood





GHS Classification:

Acute toxicity, oral (Category 4) Skin irrit. (Category 2) Eye damage. (Category 1) STOT-SE (Category 3)

GHS Label information: Hazard statement(s):

H302: Harmful if swallowed. H315: Causes skin irritation.

H318: Causes serious eve damage. H335: May cause respiratory irritation.

Precautionary statement(s):

P261: Avoid breathing dust

P264: Wash hands thoroughly after handling. Do not touch eyes. P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P301+P317: IF SWALLOWED: Get medical help.

P330: Rinse mouth.

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

P332+P317: If skin irritation occurs: Get medical help.

P304+P340: IF INHALED: Remove person to fresh air and keep in a position

comfortable for breathing

P305+P354+P338: IF IN EYES: Rinse cautiously with water for 15

minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P317: Get medical help.

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

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

Potassium chloride 7447-40-7	% 57.3% 26.3% 9.6%	231-598-3 232-094-6 anhydrous	
Magnesium chloride, hexahydrate 7791-18-6 Sodium sulfate 7757-82-6 Calcium chloride, dihydrate 10035-04-8 Potassium chloride 7447-40-7	26.3%	232-094-6 anhydrous	
Sodium sulfate 7757-82-6 Calcium chloride, dihydrate 10035-04-8 Potassium chloride 7447-40-7		,	
Calcium chloride, dihydrate 10035-04-8 Potassium chloride 7447-40-7	9.6%		
Potassium chloride 7447-40-7		231-820-9	
	4.8%	233-140-8	
Detective branida	1.65%	231-211-8	
Polassium promide 7756-02-3	0.25%	231-830-3	
Strontium chloride 10025-70-4	0.1%	233-971-6 (anhydrous)	

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

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 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.

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.

Page E1 of E2

Section 7 Handling and 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 Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Calcium Chloride Dihydrate	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.

Section 9 Physical and chemical properties

Appearance: Solid, white crystals

Odor: None.

Odor threshold: Data not available.

pH: Data not available

Melting / Freezing point: Data not available.

Boiling point: Data not available.

Flash point: Data not available

Evaporation rate (Water **= 1):** Data not available. **Flammability (solid/gas):** Data not available.

Explosion limits: Lower / Upper: Data not available Vapor pressure (mm Hg): Data not available. Vapor density (Air = 1): Data not available. Relative density (Specific gravity): Data not available.

Solubility(ies): 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: 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.

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: 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 with eyes may cause severe irritation and/or corneal injury. [Calcium Chloride]

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

Additional information: RTECS #: VZ4725000 Section 12 Ecological information

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

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

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

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 applicableShipping name:Not RegulatedHazard class:Not applicablePacking group:Not applicable

2024 ERG Guide # Not applicable

Reportable Quantity: No Marine pollutant: No

Section 15 Regulatory information

Exceptions: Not applicable

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

Component Sodium-chloride	TSCA	CERLCA (RQ)	RCRA code Not listed	DSL Listed	NDSL Not listed	CA Prop 65
Sodium sulfate Sodium sulfate Magnesium chloride, hexahydrate Calcium chloride dihydrate Potassium chloride	Listed Not listed Listed Listed	Not listed Not listed Not listed Not listed Not listed	Not listed Not listed Not listed Not listed Not listed	Listed Listed Not listed Listed Listed Listed	Not listed Not listed Not listed	This product does not contain any chemicals known to the State of California to cause cancer or
Strontium chloride Potassium bromide Section 16 Other information	Listed Listed	Not listed Not listed	Not listed Not listed	Listed Listed Listed	Not listed Not listed	reproductive toxicity.

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 Revision Date: July 29, 2025 Supercedes: July 29, 2025

Section 1 Identification Page E1 of E2

INNOVATING SCIENCE

"Cutting edge science for the classroom"

by Aldon
221 Rochester
Avon, NY 144
6859 2258-617

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

Product SODIUM CARBONATE, ANHYDROUS

Synonyms Soda Ash

Section 2 Hazards identification

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



GHS Classification: Eye irrit. (Category 2A)

GHS Label information: Hazard statement:

H319: Causes serious eye irritation.

Precautionary statement:

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Hazards not otherwise classified:

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

CAS # 497-19-8	100%	EINECS 207-838-8	
497-19-8	100%	207-838-8	

Section 4 First aid measures

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

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

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

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

Section 5 Fire fighting measures

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

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

Section 6 Accidental release measures

Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

Section 7 Handling and storage Page E2 of E2

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

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

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

Section 8	Exposure controls / personal protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits.	Sodium carbonate	None established.	None established.	None established.			

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

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

Section 9 Physical and chemical properties

Appearance: Solid, white powder.

Odor: No odor.

Odor threshold: Data not available.

pH: Data not available.

Melting / Freezing point: 864°C (1587°F)

Boiling point: Decomposes Flash point: Not flammable

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

Relative density (Specific gravity): 2.533 Solubility(ies): 17% @ 20°C in water Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: 1000°C (1832°F)

Marine pollutant: No

Viscosity: Data not available. Molecular formula: Na₂CO₃ Molecular weight: 105.99

Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur.

Conditions to avoid: Excessive temperatures. Hygroscopic material, avoid moisture.

Incompatibilities with other materials: Acids cause decompostion liberating gaseous carbon dioxide. When mixed with lime dust and water, corrosive and caustic soda may

be produced.

Hazardous decomposition products: Carbon dioxide.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: 4090 mg/kg ; Inhalation-rat LC50: 2.3 mg/l/2 hours ; Dermal-rat LD50: 2210 mg/kg

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

Germ cell mutagenicity: Data not available

Carcinogenity: Data not available

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

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

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

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

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

Potential health effects:

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

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

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

Eyes: Causes eye irritation.

Signs and symptoms of exposure: Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting.

Additional information: RTECS #: VZ4050000

Section 12 Ecological information

Toxicity to fish: LC50 - Lepomis macrochirus (Bluegill) - 300 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 265 mg/l - 48 h

Toxicity to algae: No data available

Persistence and degradability: No data available

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.

Reportable Quantity: No

Section 14 Transport information

UN/NA number:Not applicableShipping name:Not RegulatedHazard class:Not applicablePacking group:Not applicable

Packing group. Not applicable

Exceptions: Not applicable 2024 ERG Guide # Not applicable

Section 15 Regulatory information

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

Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Sodium carbonate	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

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.

Section 1 Identification Page E1 of E2

INNOVATING SCIENCE by Aldon
221 Rochester Stree
"Cutting edge science for the classroom"

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

Product	SODIUM BICARBONATE, ANHYDROUS
Synonyms	Baking Soda / Sodium Hydrogen Carbonate / Carbonic Acid Sodium (1:1)
Section 2	Hazards identification

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):

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.

Hazards not otherwise classified:

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

Section 3 Composition / information on ingredients					
Chemical Name	CAS#	%	EINECS		
Sodium bicarbonate	144-55-8	100%	205-633-8		

Section 4 First aid measures

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

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

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

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

Section 5 Fire fighting measures

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

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

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. This material is commonly used to extinguish fires.

Section 6 Accidental release measures

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

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

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

Page E2 of E2 Section 7 Handling and storage

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

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

Section 8	Exposure controls / personal protection						
Exposure Limits:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits.	Sodium bicarbonate	None established	None established	None established			

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

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

Section 9 Physical and chemical properties

Appearance: Solid, white crystalline powder.

Odor: No odor.

Odor threshold: Data not available.

pH: 8.2 (1% solution)

Melting / Freezing point: Data not available

Boiling point: Decomposes

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): Negligible Vapor density (Air = 1): Data not available

Relative density (Specific gravity): 2.16 @ 20°C Solubility(ies): 8.6 g/100 ml water at 20°C

Partition coefficient: Data not available Auto-ignition temperature: Data not available Decomposition temperature: Data not available

Viscosity: Data not available. Molecular formula: NaHCO3 Molecular weight: 84.01

Section 10 Stability and reactivity

Chemical stability: Stable Hazardous polymerization: Will not occur. Conditions to avoid: High temperature causes decomposition to sodium carbonate, water and carbon dioxide.

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

Hazardous decomposition products: Gaseous carbon dioxide.

Section 11 **Toxicological information**

Acute toxicity: Oral-rat LD50: 4220-4400 mg/kg Skin corrosion/irritation: Skin-rabbit - not irritating Serious eye damage/irritation: Eye-rabbit - not irritating Respiratory or skin sensitization: Non sensitizing 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: Excessive dust may irritate respiratory tract.

Ingestion: Ingestion may cause gastrointestinal disturbance if ingested.

Skin: No hazard known.

Eves: Contact with eves may cause very slight irritation.

Signs and symptoms of exposure: See Potential health effects above.

Additional information: RTECS #: VZ0950000 Section 12 **Ecological information**

Toxicity to fish: Gambusia affinis (fish, freshwater) LC50: 7550 mg/l/24 hours

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacea) EC50: 2350 mg/l/48 hours

Toxicity to algae: Nitcheria linearis (Algae) LC50: 650 mg/l/5 day

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

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

Section 14 Transport information

UN/NA number: Not applicable Shipping name: Not Regulated

Hazard class: Not applicable Packing group: Not applicable Reportable Quantity: No Marine pollutant: No

2024 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)	RCRA code	DSL	NDSL	CA Prop 65
Sodium bicarbonate	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

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: October 25, 2024 Supercedes: November 11, 2022 Form 06/2015

Section 1 Identification Page E1 of E2

INNOVATING SCIENCE

by Aldon
221 Rochester Stree
4von, NY 14414-94
(265) 225-6317

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

Product VINEGAR - WHITE

Synonyms

Section 2 Hazards identification

Not available

Signal word: WARNING Pictograms: No symbol required Target organs: None known

GHS Classification: 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	7732-18-5	92-96%	231-791-2			
Acetic acid	64-19-7	4-6%	200-580-7			

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: Carbon dioxide, dry chemical, 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. Dangerous in contact with chromic acid, sodium peroxide, nitric acid or other oxidizing materials.

Section 6 Accidental release measures

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

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

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

Section 7 Handling and storage 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						
Evnosuro Limite:	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)			
Exposure Limits:	Acetic acid	TWA: 10 ppm / STEL: 15 ppm	TWA: 10 ppm	TWA: 10 ppm / STEL: 15 ppm			

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.

Section 9 Physical and chemical properties

Appearance: Clear, colorless liquid.

Odor: Vinegar-like odor.

Odor threshold: No data available

pH: No data available

Melting / Freezing point: ~ 0°C (~ 32°F) [water] Boiling point: ~ 100°C (212°F) [water]

Flash point: Not flammable.

Evaporation rate (Water = 1): < 1
Flammability (solid/gas): No data available
Explosion limits: Upper/Lower: No data available
Vapor pressure (mm Hg): 14 [water]

Vapor density (Air = 1): 0.7 [water]
Relative density (Specific gravity): 1.0 [water]

Solubility(ies): Complete.

Partition coefficient: (n-octanol / water): No data available Auto-ignition temperature: No data available Decomposition temperature: No data available

Viscosity: No data 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: Oxidizing agents, such as hydrogen peroxide, nitric acid, perchloric acid or chromium trioxide. Strong alkalies such as sodium hydroxide.

Hazardous decomposition products: Oxides of carbon.

Section 11 Toxicological information

Acute toxicity: Oral-rat LD50: 3310 mg/kg; Dermal-rabbit LD50: 1060 mg/kg; Inhalation-rat LC50: 4640 ppm/4 hour (11.4 mg/l/4 hour) [Acetic acid]

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: 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: 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.

Ingestion: May be harmful if swallowed.

Skin: May cause irritation. Eyes: May cause irritation.

Signs and symptoms of exposure: Data not available at this dilution. Additional information: RTECS #: AF1225000 [Acetic acid]

Section 12 Ecological information

Toxicity to fish: Low chronic toxicity to fish [Acetic acid]

Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (water flea) 300.82 mg/l / 48 hours [Acetic acid]

Toxicity to algae: Skeletonema costatum 300.82 mg/l / 72 hours - low toxicity to algae [Acetic acid]

Persistence and degradability: Readily biodegradable

Mobility in soil: 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

Packing group: Not applicable

Packing group: Not applicable

Reportable Quantity: Yes

Marine pollutant: No

Exceptions: Not applicable 2024 ERG Guide # Not applicable

Section 15 Regulatory information A chemical is considered to be listed if the CAS number for the anhydrous form is on the Inventory list.

	,					
Component	TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	CA Prop 65
Acetic acid	Listed	5000 lbs (2270 kg)	Not listed	Not listed	Not listed	This product does not contain any chemicals known to the State of California to cause cancer or
						raproductive tovicity

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.