Section 1 Chemical Product and Company Information

HOME SCIENCE TOOLS
665 Carbon Street
Billings, MT 59102
800-860-6272
www.homesciencetools.com

CHEMTREC 24 Hour Emergency
Phone Number (800) 424-9300
For laboratory 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 several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.

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

Chemical Name	CAS #	%	EINECS
Sodium carbonate	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 & Storage

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)
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 & 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 (Air = 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)
Viscosity: Data not available.
Molecular formula: Na_2CO_3
Molecular weight: 105.99

Section 10 Stability & 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.
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
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

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

Section 14 Transport Information

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2012 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	WHMIS Classification
Sodium carbonate	Listed	Not listed	Not listed	Not listed	Not listed	D2B ; E

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.

Section 1 Chemical Product and Company Identification

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

Product	**HYDROGEN PEROXIDE, 6%**
Synonyms	Hydrogen Dioxide

Section 2 Hazards Identification

Signal word: WARNING
Pictograms: GHS07
Target organs: Respiratory and gastrointestinal systems, skin, eyes

GHS Classification:
Acute toxicity (Category 4)
Eye irritation (Category 2A)

GHS Label information: **Hazard statement:**
H302: Harmful if swallowed.
H319: Causes serious 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 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.
P337+P313: If eye irritation persists: Get medical attention.
P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Supplementary information:
Do not tamper with venting mechanism.

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 / Information on Ingredients

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	<94%	231-791-2
Hydrogen peroxide	7722-84-1	6%	231-765-0
Acetanilide	103-84-4	0.05%	203-150-7

Section 4 First Aid Measures

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

INHALATION: MAY BE HARMFUL IF INHALED. 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 IRRITATION AND / OR BURNS TO EYES. 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 IRRITATION AND / OR BURNS TO THE SKIN. Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Water only! Apply vast amounts for cooling and dilution.
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 product is a strong oxidizer which may release oxygen and promote the combustion of flammable materials. Spontaneous combustion can occur if allowed to remain in contact with oxidizable materials. Drying of product on clothing or combustible material may cause fire.

Section 6 Accidental Release Measures

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

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

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

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 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. Keep away from ignition sources. Do not allow temperature of storage to rise above 100°F.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Hydrogen peroxide	TWA: 1 ppm ; 1.4 mg/m^3 (A3)	TWA: 1 ppm ; 1.4 mg/m^3	TWA: 1 ppm ; 1.4 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 respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: Slightly pungent 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 & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures, heat, sparks, open flame and other sources of ignition. Contact with combustible materials may result in spontaneous combustion.

Incompatible materials: Acids, bases, metals, metal salts, reducing agents, organic materials, alkalies,dust and dirt contaminants, flammable substances, oxidizable materials.

Hazardous decomposition products: Oxygen, which will promote the combustion of flammable material.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 800 mg/kg [50% hydrogen peroxide]
Skin corrosion/irritation: Skin-rabbit - Slight irritant.
Serious eye damage/irritation: Eyes-rabbit - Severe irritant.
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 classified: 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: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Expected to be irritating to respiratory tract.
Ingestion: Expected to cause burns to the gastrointestinal tract.
Skin: Expected to cause irritation and/or burns. As the concentration or time of exposure increases, the extent of damage increases.
Eyes: Expected to cause irritation and/or burns. Could cause corneal damage which may occur several days later.
Signs and symptoms of exposure: See Potential health effects above. Medical conditions which may be aggravated by exposure include conjunctivitis of the eye, dermatitis of the skin, asthma and respiratory diseases.
Additional information: RTECS #: MX0900000 [Hydrogen peroxide]

Section 12 Ecological Information

Toxicity to fish: Gambusia affinis (fish, fresh water), NOEC = 2.38 - 9.86 mg/l [Hydrogen peroxide]
Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 7.7 mg/l/24 hours [Hydrogen peroxide]
Toxicity to algae: Chlorella vulgaris (Algae), EC50 = 2.5 mg/l/growth rate [Hydrogen peroxide]
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

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

Section 14 Transport Information (US DOT / CANADA TDG)

UN/NA number: Not applicable
Shipping name: Not Regulated
Hazard class: Not applicable
Packing group: Not applicable
Reportable Quantity: No
Marine pollutant: No
Exceptions: Not applicable
2016 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
Hydrogen peroxide	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.

SAFETY DATA SHEET **SDS No.:** AA0265 **CORROSIVE STORAGE CODE WHITE**

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Product	**AMMONIUM HYDROXIDE, 28-30%**
Synonyms	Ammonium Hydroxide, Water Solution

Section 2 Hazards Identification

Signal word: DANGER
Pictograms: GHS05 / GHS09
Target organs: Eyes, Skin, Mucous membranes

GHS Classification:
Skin corrosion (Category 1B)
Acute aquatic (Category 1)
STOT-SE (Category 3)

GHS Label information: **Hazard statement:**
H314: Causes severe skin burns and eye damage.
H335: May cause respiratory irritation.
H400: Very toxic to aquatic life.

Precautionary statement:
P260: Do not breathe mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310: Immediately call a POISON CENTER or doctor.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312: Call a POISON CENTER or doctor if you feel unwell.
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.
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.

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

Chemical Name	CAS #	%	EINECS
Water	7732-18-5	Approximately 70-72%	231-791-2
Ammonium hydroxide (as Ammonia)	1336-21-6	Approximately 28-30%	215-647-6

Section 4 First Aid Measures

INGESTION: MAY BE FATAL 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 FATAL 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 BURNS. 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 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: Carbon dioxide, dry chemical, dry sand, alcohol foam.

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

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly.

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: Carefully neutralize with Sodium bicarbonate, 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.

(2012 EMERGENCY RESPONSE GUIDEBOOK, (PHH50-ERG2012), GUIDE # 154)

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/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. Keep away from ignition sources.

Section 8 Exposure Controls / Personal Protection

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Ammonia CAS No. 7664-41-7	TWA: 17 mg/m^3 ; STEL: 24 mg/m^3	TWA: 50 ppm, 35 mg/m^3	TWA: 18 mg/m^3 ; STEL: 27 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 respirator.

Section 9 Physical & Chemical Properties

Appearance: Clear, colorless liquid.
Odor: Strong, pungent, suffocating odor.
Odor threshold: Data not available.
pH: Data not available.
Melting / Freezing point: -77°C (-106°F)
Boiling point: 36°C (97°F)
Flash point: Data not available

Evaporation rate (Water **= 1):** 1
Flammability (solid/gas): Data not available.
Explosion limits: Lower / Upper: 16% / 27%(NH_3 gas)
Vapor pressure (mm Hg): 115 mm @ 20°C (68°F)
Vapor density (Air = 1): 0.6-1.2
Relative density (Specific gravity): 0.900
Solubility(ies): Complete in water.

Partition coefficient: Data not available
Auto-ignition temperature: 651°C (1204°F)
Decomposition temperature: Data not available.
Viscosity: Data not available.
Molecular formula: NH_4OH
Molecular weight: 35.05

Section 10 Stability & Reactivity

Chemical stability: Stable
Hazardous polymerization: Will not occur.
Conditions to avoid: Excessive temperatures which cause evaporation.

Incompatible materials: Acids, strong oxidizers, halogens, heavy metals.

Hazardous decomposition products: Decomposes to ammonia gas and above 450°C (842°F) to hydrogen gas and nitrogen oxides.

Section 11 Toxicological Information

Acute toxicity: Oral-rat LD50: 350 mg/kg [Ammonium hydroxide, anhydrous]
Skin corrosion/irritation: Skin-rabbit - Severe irritant.
Serious eye damage/irritation: Eyes-rabbit - Severe irritant.
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: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.
STOT-repeated exposure: Data not available
Aspiration hazard: Data not available
Potential health effects:
Inhalation: Burning sensation, cough, labored breathing, shortness of breath, sore throat.
Ingestion: Abdominal cramps, abdominal pain, sore throat, vomiting,
Skin: Redness, skin burns, pain, blisters.
Eyes: Redness, pain, blurred vision, burns.
Signs and symptoms of exposure: Material is extremely destructive to tissue of the mucous membranes, upper respiratory, gastrointestinal and digestive tracts, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Additional information: RTECS #: BQ9625000 [Ammonium hydroxide, anhydrous]

Section 12 Ecological Information

Toxicity to fish: LC50 Lepomis macrochirus (bluegill) 0.024-0.093 mg/L/48H
Toxicity to daphnia and other aquatic invertebrates: LC50 Daphnia magna (water flea) 0.66 mg/L/48H @ 22°C
Toxicity to algae: TLm Diatom (algae) 420 mg/L/120H @ 22°C (50% growth reduction)
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and vPvB assessment: No data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Section 13 Disposal Considerations

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

Section 14 Transport Information

UN/NA number: UN2672 **Shipping name:** Ammonia solution
Hazard class: 8 **Packing group:** III **Reportable Quantity:** 1,000 lbs (454 kg) **Marine pollutant:** No
Exceptions: Limited quantity equal to or less than 5 L **2012 ERG Guide #** 154

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
Ammonium hydroxide	Listed	1,000 lbs (454 kg)	Not listed	Listed	Not listed	E

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: February 15, 2013 **Supercedes:** November 22, 2011