

Material Safety Data Sheet



Date of issue 8 May 2013

Version 2

1. Product and company identification

- Product name** : Calcium Hypochlorite Granular
- Code** : 01592
- Synonym** : Calcium Hypochlorite Granular; Cal Hypo Granules; Ca(OCl)₂. All-Clear™ ChlorRight, All-Clear™ Shock Clear, AmeriChlor Calcium Hypochlorite Granules, Calcium Hypochlorite, FreeStyle® Calcium Hypochlorite Granular 65, Induclor™, Induclor™ 70, Omega Calcium Hypochlorite Granules, Pittclor®, Power Powder® Plus™, Power Powder® Pro™, Prestochlor™, Re-Fresh®, Regal®, Repak™ + Granules, Repak™ Dry Chlorinating Granules, Super Shock-It®, Super Shock-It® 73, Super Zappit™, Sustain® Shock Treatment, Vanguard® Plus Calcium Hypochlorite Granules, Zappit™, Zappit™ 73.
- Supplier** : Axiall, LLC
115 Perimeter Center Place
Suite 460
Atlanta, GA 30346
USA
- Emergency telephone number** : +1 304-455-6882
- Technical Phone Number** : 1-800-243-6774 (C/A) 8am-5pm Eastern time

2. Hazards identification

- Emergency overview** : DANGER!
- STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. DO NOT MIX WITH OTHER CHEMICALS, INCLUDING ANY OTHER POOL CHEMICALS OF ANY KIND. MIXING WITH OTHER CHEMICALS COULD CAUSE A FIRE OR EXPLOSION. Contamination with moisture, acids, organic matter, other chemicals (including, but not limited to cleaning chemicals and other pool chemicals), petroleum or paint products or other easily combustible materials may start a chemical reaction with generation of heat, liberation of hazardous gases and possible violent reaction leading to fire or explosion. ALWAYS ADD PRODUCT TO LARGE QUANTITIES OF WATER TO FULLY DISSOLVE PRODUCT. DO NOT POUR WATER INTO PRODUCT, ALWAYS ADD PRODUCT TO WATER. Do not add this product to any dispensing device containing remnants of any other product or pool chemical.

CAUSES EYE AND SKIN BURNS. CAUSES RESPIRATORY TRACT IRRITATION. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Very toxic to aquatic organisms.

Keep away from heat, sparks, flames, direct sunlight, and other sources of heat, including lighted tobacco products. Keep away from incompatible materials and combustible materials. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container closed. If product becomes contaminated or decomposes do not reseal container. If possible isolate container in open air or well-ventilated area. Wash thoroughly after handling. Keep out of waterways.

Potential acute health effects

- Inhalation** : Harmful if inhaled. Severely irritating to the respiratory system. Can irritate eyes, nose, mouth and throat.
- Ingestion** : Harmful or fatal if swallowed. May cause burns to mouth, throat and stomach.
- Skin** : Corrosive to the skin. Causes burns. Harmful in contact with skin.
- Eyes** : Corrosive to eyes. Causes burns.

2. Hazards identification

Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:
Respiratory tract irritation
coughing
breathing difficulty or shortness of breath
pulmonary edema
- Ingestion** : Adverse symptoms may include the following:
stomach pains
nausea or vomiting
gastric perforation
- Skin** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Eyes** : Adverse symptoms may include the following:
pain
watering
redness
Cornea opacity
Direct contact with the eyes can cause irreversible damage, including blindness.
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

This Material Safety Data Sheet has been prepared in accordance with Canada's Workplace Hazardous Materials Information System (WHMIS) and the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See toxicological information (Section 11)

3. Composition/information on ingredients

| <u>Name</u> | <u>CAS number</u> | <u>%</u> |
|----------------------|-------------------|----------|
| calcium hypochlorite | 7778-54-3 | 65 - 76 |
| sodium chloride | 7647-14-5 | 10 - 30 |
| calcium carbonate | 471-34-1 | 1 - 3 |
| calcium dihydroxide | 1305-62-0 | 1 - 3 |
| calcium chlorate | 10137-74-3 | 0 - 3 |

Notes: Available Chlorine: 65-76%, Inert ingredients 24-35 %(includes 5.5-8.5% water).

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Material Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Continue rinsing until medical attention can be obtained.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting. Get medical attention immediately.

4 . First aid measures

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

Flammability of the product : Product is not known to be flammable, combustible, or pyrophoric. This material increases the risk of fire and may aid combustion. Contact with combustible material may cause fire. This product is a strong oxidizer which is capable of intensifying a fire once started. Container may rupture.

Extinguishing media

Suitable : Drench with large quantities of water only.

Not suitable : Do not use dry chemicals or foams. Product supplies own oxygen, therefore attempts to smother fire with a wet blanket, carbon dioxide, dry chemical extinguisher or other means are not effective. Product has the potential to cause a violent reaction if dry chemical fire extinguishers are used.

Special exposure hazards : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Emits toxic fumes under fire conditions. Chlorine gas may be generated. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon oxides
halogenated compounds
metal oxide/oxides

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Large spill : Use extreme caution in handling spilled material. Use spark-proof tools and explosion-proof equipment. Do not mix this product with any other chemicals, including any other pool chemicals of any kind, such as other disinfection or "shock" pool products. Contamination with moisture, acids, organic matter, other chemicals (including, but not limited to cleaning chemicals and other pool chemicals), petroleum or paint products or other easily combustible materials may start a chemical reaction with generation of heat, liberation of hazardous gases and possible violent reaction leading to fire or explosion. If fire or decomposition occurs in area of spill, immediately douse with plenty of water. Otherwise, sweep up all visible material using a clean (new, if possible), dry shovel and broom and immediately dissolve material in a water-filled container. Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product is being consumed. Prevent entry into sewers, water courses, basements or confined areas. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Small spill :

6 . Accidental release measures

Use extreme caution in handling spilled material. Use spark-proof tools and explosion-proof equipment. Do not mix this product with any other chemicals, including any other pool chemicals of any kind, such as other disinfection or "shock" pool products. Contamination with moisture, acids, organic matter, other chemicals (including, but not limited to cleaning chemicals and other pool chemicals), petroleum or paint products or other easily combustible materials may start a chemical reaction with generation of heat, liberation of hazardous gases and possible violent reaction leading to fire or explosion. If fire or decomposition occurs in area of spill, immediately douse with plenty of water. Otherwise, sweep up all visible material using a clean (new, if possible), dry shovel and broom and immediately dissolve material in a water-filled container. Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product is being consumed. Prevent entry into sewers, water courses, basements or confined areas. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

7 . Handling and storage

Handling : Use extreme caution in handling spilled material. Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Do not swallow. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container with the lid securely closed. Keep away from heat, sparks, flames, direct sunlight, and other sources of heat, including lighted tobacco products. Keep away from combustible material. Add this product only to water. Never add water to this product. Always add the product to large quantities of water. Do not mix this product with any other chemicals, including any other pool chemicals of any kind, such as other disinfection or "shock" pool products. Fire may result if contaminated with acids, organic materials and other easily combustible materials such as oil, kerosene, gasoline, paint products wood and paper. Use only a clean (new, if possible), dry scoop made of metal or plastic each time product is taken from the container. Do not add this product to any dispensing device containing remnants of any other product or pool chemical. Such use may cause violent reaction leading to fire or explosion. Empty containers retain product residue and can be hazardous. Do not reuse container. Residual material remaining in empty container can react to cause fire. Thoroughly flush empty container with water then destroy by placing in trash collection.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from acids, alkalis, reducing agents and combustibles. See NFPA 400. Hazardous Materials Code for further information. (Please note that NFPA 400, Hazardous Materials Code recently replaced NFPA 430, Code for Storage of Liquid and Solid Oxidizers.) Keep container closed. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. If product becomes contaminated or decomposes do not resealed container. If possible isolate container in open air or well-ventilated area. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Do not contaminate water, food, or feed by storage or disposal of this product.

8 . Exposure controls/personal protection

| Name | Result | ACGIH | OSHA | Ontario | Mexico | IPEL |
|------|--------|-------|------|---------|--------|------|
| | | | | | | |

8 . Exposure controls/personal protection

| | | | | | | |
|----------------------|------|-----------------------------|---|---------------------|---------------------|---------------------|
| calcium hypochlorite | TWA | Not established | Not established | Not established | Not established | 1 mg/m ³ |
| | STEL | Not established | Not established | Not established | Not established | 2 mg/m ³ |
| calcium carbonate | TWA | 10 MG/M3 TD 3 MG/M3 R | 5 mg/m ³ R 15 mg/m ³ TD 5 mg/m ³ R 15 mg/m ³ | Not established | Not established | Not established |
| calcium dihydroxide | TWA | 5 mg/m ³ | 5 mg/m ³ R 15 mg/m ³ TD | 5 mg/m ³ | 5 mg/m ³ | Not established |
| | | | | | | |

Key to abbreviations

| | | | |
|-------|---|------|------------------------------------|
| A | = Acceptable Maximum Peak | S | = Potential skin absorption |
| ACGIH | = American Conference of Governmental Industrial Hygienists. | SR | = Respiratory sensitization |
| C | = Ceiling Limit | SS | = Skin sensitization |
| F | = Fume | STEL | = Short term Exposure limit values |
| IPEL | = Internal Permissible Exposure Limit | TD | = Total dust |
| OSHA | = Occupational Safety and Health Administration. | TLV | = Threshold Limit Value |
| R | = Respirable | TWA | = Time Weighted Average |
| Z | = OSHA 29CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances | | |

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls may be required to control the primary or secondary risks associated with this product.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes : Chemical splash goggles and face shield.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves : nitrile, neoprene, butyl rubber.

Respiratory : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls :

8 . Exposure controls/personal protection

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

| | |
|---|---|
| Physical state | : Solid. [Granular solid.] |
| Flash point | : Closed cup: Not applicable. |
| Decomposition temperature | : 170 to 180°C (338 to 356°F) |
| Material supports combustion. | : Yes. |
| Color | : Various |
| Odor | : Slight CHLORINE |
| pH | : Alkaline. |
| Boiling/condensation point | : Decomposes. @ 170-180°C (338-356°F) |
| Melting/freezing point | : Not available. |
| Specific gravity | : Not available. |
| Vapor pressure | : Not available. |
| Vapor density | : Not available. |
| Volatility | : 0% (w/w) |
| Evaporation rate | : Not available. |
| Viscosity | : Not Applicable |
| Solubility | : Soluble in the following materials: cold water. |
| Water Solubility at room temperature | : 100 g/l |
| Partition coefficient: n-octanol/water | : Not available. |
| % Solid. (w/w) | : 100 |

Bulk Density: 63-67 lbs/ft³ (1 - 1.07 g/cm³)

10 . Stability and reactivity

| | |
|---|--|
| Stability | : The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information. Product decomposes at approximately 170-180°C (338-356°F) releasing oxygen gas and some chlorine gas. |
| Conditions to avoid | : Stable under recommended storage and handling conditions (see Section 7). Heating may cause a fire or explosion. Excessive heat will cause decomposition resulting in the release of oxygen and chlorine gas. |
| Materials to avoid | : Highly reactive or incompatible with the following materials: moisture, combustible materials, organic materials, metals, acids, alkalis, oxidizing materials, reducing materials, Ammonia., Petroleum products., Paint products., Wood and paper., Pool chemicals. Acid or ammonia contamination will release toxic gases. |
| Hazardous decomposition products | : Product slowly releases chlorine gas. |
| Possibility of hazardous reactions | : Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with combustible materials contact with acids/ammonia Reactions may include the following: risk of causing or intensifying fire liberation of toxic gas |

11 . Toxicological information

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-------------|---------|-------------|----------|
| calcium hypochlorite | LD50 Oral | Rat | 850 mg/kg | - |
| | LD50 Dermal | Rabbit | >1000 mg/kg | - |
| sodium chloride | LD50 Oral | Rat | 3000 mg/kg | - |
| calcium carbonate | LD50 Oral | Rat | 6450 mg/kg | - |
| calcium dihydroxide | LD50 Oral | Rat | 7340 mg/kg | - |
| calcium chlorate | LD50 Oral | Rat | 4.5 g/kg | - |

Conclusion/Summary : Harmful or fatal if swallowed. May be harmful if absorbed through skin. May be harmful if inhaled.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Skin : Corrosive. Causes burns.

Eyes : Corrosive. Causes eye burns.

Respiratory : Severely irritating to the respiratory system.

Sensitization

Skin : Not available.

Respiratory : Not available.

Potential chronic health effects

: Corrosive to the eyes, skin, respiratory system and digestive tract.

Target organs

: Contains material which may cause damage to the following organs: lungs, mucous membranes, gastrointestinal tract, upper respiratory tract, skin, eye, lens or cornea, stomach.

Carcinogenicity

Classification

| Product/ingredient name | ACGIH | IARC | NTP | OSHA |
|-------------------------|-------|------|-----|------|
| calcium hypochlorite | - | 3 | - | - |

Carcinogen Classification code: ACGIH: A1, A2, A3, A4, A5
IARC: 1, 2A, 2B, 3, 4
NTP: Proven, Possible
OSHA: +
Not listed or regulated as a carcinogen: -

Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|-------------------------|--|---|----------|
| calcium hypochlorite | OECD 471 Bacterial Reverse Mutation Test | Experiment: In vitro Subject: Bacteria | Positive |
| | - | Experiment: In vitro Subject: Mammalian-Animal | Positive |
| | OECD 474 Mammalian Erythrocyte Micronucleus Test | Experiment: In vivo Subject: Mammalian-Animal | Negative |

Conclusion/Summary : Mutagenic effects - Equivocal evidence.

12 . Ecological information

Environmental effects : Very toxic to aquatic organisms.

Aquatic ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--|--|----------|
| calcium hypochlorite | Acute LC50 57 to 60 ug/L Fresh water | Fish - Bluegill - Lepomis macrochirus | 96 hours |
| | Acute LC50 37 ug/L Marine water | Fish - Atlantic silverside - Menidia menidia | 96 hours |
| | Acute EC50 0.073 to 0.079 ppm Fresh water | Daphnia - Water flea - Daphnia magna | 48 hours |
| sodium chloride | Acute LC50 1294600 ug/L Fresh water | Fish - Bluegill - Lepomis macrochirus | 96 hours |
| | Acute EC50 402600 to 469200 ug/L Fresh water | Daphnia - Water flea - Daphnia magna | 48 hours |
| | Chronic NEL 0.86 g/L Fresh water | Fish - Fathead minnow - Pimephales promelas | 96 hours |
| calcium dihydroxide | Acute LC50 356 mg/L Marine water | Fish - Guppy - Poecilia reticulata | 96 hours |
| | Chronic NOEC 56 mg/L Marine water | Fish - Guppy - Poecilia reticulata | 96 hours |

Conclusion/Summary : LC₅₀: 0.088 mg/L (96 hr, Bluegill Sunfish) Very toxic to aquatic life. Do not allow to enter groundwater, surface water or drains.

13 . Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Spilled material that has been swept up and dissolved in water should be used immediately in the normal application for which this product is being consumed. If this is not possible, material may be neutralized. Please contact Axiall Corporation Emergency Response team for guidance at 304-455-6882. Note: Only properly neutralized material should be flushed to sewer. Unneutralized material can cause environmental damage to receiving water or can interfere with treatment plant operation. Care must be taken when using or disposing of chemical materials and/or their containers to prevent environmental contamination. Empty containers retain product residue and can be hazardous. Residual material remaining in empty container can react to cause fire. Thoroughly flush empty container with water then destroy by placing in trash collection. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14 . Transport information

14 . Transport information

| Regulation | UN number | Proper shipping name | Classes | PG* | Additional information |
|------------|-----------|---|---------|-----|--|
| UN | 2880 | CALCIUM HYPOCHLORITE, HYDRATED | 5.1 | II | - |
| IMDG | 2880 | CALCIUM HYPOCHLORITE, HYDRATED. Marine pollutant (calcium hypochlorite) | 5.1 | II | - |
| DOT | 2880 | CALCIUM HYPOCHLORITE, HYDRATED | 5.1 | II | Reportable quantity 14.184 lbs / 6.4397 kg Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. |

PG* : Packing group

Reportable quantity RQ : CERCLA: Hazardous substances.: calcium hypochlorite: 10 lbs. (4.54 kg);

15 . Regulatory information**United States inventory (TSCA 8b)** : All components are listed or exempted.**Australia inventory (AICS)** : All components are listed or exempted.**Canada inventory (DSL)** : All components are listed or exempted.**China inventory (IECSC)** : All components are listed or exempted.**Europe inventory (REACH)** : Please contact your supplier for information on the inventory status of this material.**Japan inventory (ENCS)** : All components are listed or exempted.**Korea inventory (KECI)** : All components are listed or exempted.**New Zealand (NZIoC)** : All components are listed or exempted.**Philippines inventory (PICCS)** : All components are listed or exempted.**United States****EPA ID No. - Pesticide.** : Please contact your supplier to get the information.**SARA 302/304:** No products were found.

CERCLA: Hazardous substances.: calcium hypochlorite: 10 lbs. (4.54 kg);

SARA 311/312 SDS Distribution - Chemical Inventory - Hazard Identification:

| <u>Chemical name</u> | <u>CAS #</u> | <u>Acute</u> | <u>Chronic</u> | <u>Fire</u> | <u>Reactive</u> | <u>Pressure</u> |
|------------------------------|--------------|--------------|----------------|-------------|-----------------|-----------------|
| calcium hypochlorite | 7778-54-3 | Y | N | N | Y | N |
| sodium chloride | 7647-14-5 | N | N | N | N | N |
| calcium dihydroxide | 1305-62-0 | Y | N | N | N | N |
| calcium carbonate | 471-34-1 | N | N | N | N | N |
| calcium chlorate | 10137-74-3 | Y | N | N | Y | N |
| Product as-supplied : | | Y | N | N | Y | N |

California Prop. 65

Not applicable.

Canada**WHMIS (Canada)** : Class E: Corrosive solid.
Class C: Oxidizing material.**Mexico****Classification****Flammability** : 0 **Health** : 3 **Reactivity** : 2

16 . Other information

Hazardous Material Information System (U.S.A.)

Health : 3 Flammability : 0 Physical hazards : 2

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health : 3 Flammability : 0 Instability : 2

Other special considerations : NSF® Standard 60 Drinking Water Treatment Chemicals – Some calcium hypochlorite brands have Health Effect Listing and are certified for maximum use of 14-15 mg/L.

This product is registered with U.S. EPA as a pesticide.

Date of previous issue : 3/4/2013.

Organization that prepared the MSDS : EHS

✔ Indicates information that has changed from previously issued version.

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by Axiall, LLC; and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.