



HASA DRI-SHOCK

Material Safety Data Sheet

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HASA DRI-SHOCK
Material Safety Data Sheet MSDS No.206

IDENTIFICATION OF PRODUCT

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| Product Name: | HASA DRI-SHOCK |
| Common Chemical Names: | Dry chlorinating compound, granular chlorinating compound, cal hypo, HTH, shocking granules |
| Chemical Names of Ingredients: | Calcium hypochlorite, Ca [OCI] ₂ , CAS #7778-54-3 Calcium perchlorate, Ca [ClO ₄] ₂ , CAS #13477-36-6 Calcium chloride, CaCl ₂ , CAS #10043-52-4 Calcium carbonate, CaCO ₃ , CAS #1317-65-3 Calcium hydroxide, Ca [OH] ₂ , CAS #1345-62-0 and Water |
| Chemical Family: | Inorganic hypochlorite |
| CAS Registry Number: | 7778-54-3 |
| Empirical Formula: | Ca [OCI] ₂ 2H ₂ O [active ingredient] |

PHYSICAL AND CHEMICAL PROPERTIES

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| Vapor Pressure: | Very small. Impossible to measure. | Flash Point: | Not Applicable. |
| Weight/Gallon: | Not Applicable. | pH: | 10-11 [1% solution] |
| Density [liquid]: | Not Applicable. | Odor: | Slight Chlorine |
| Boiling Point: | Decomposes at 180°C at 760 mm Hg | Bulk Density: | 65-67 lbs/ft ³ |
| Melting Point: | Not Applicable. | Freezing Point: | Not Applicable. |
| Physical State: | Crystalline solid. | Color: | White |
| Solubility in Water: | 2.17 g/l [27°C] | Stability: | Stable |

PHYSICAL HAZARDS

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| Potential for Fire: | Addition of this product to a dispensing device containing other products or contamination with organic matter, moisture, or other chemicals may cause a violent reaction leading to fire or explosion. |
| Potential for Explosion: | Addition of this product to a dispensing device containing other products or contamination with organic matter, moisture, or other chemicals may cause a violent reaction leading to fire or explosion. |
| Reactivity: | Contamination with organic matter, moisture, or other chemicals may start a chemical reaction with the liberation of hazardous gases and possible generation of fire or explosion. |
| Extinguishing Media: | Water in excess. |
| Fire Fighting Procedures: | SCBA + protective clothing. |

| HEALTH HAZARDS | |
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| Signs and Symptoms of Exposure: | Eye and skin irritation. |
| Medical Conditions Aggravated by Exposure: | No data available. |
| Oral [ingestion] LD₅₀: | 850 mg/kg |
| Dermal [skin absorption] LD₅₀: | >1000 mg/kg |
| Inhalation [breathing] LC₅₀: | >3.5 mg/l [1 hr] [no mortality at this level] |
| Eye Irritation: | No data available. |
| Skin Irritation: | Mild. Not a skin sensitizer. |
| OSHA PEL: | None Established. |
| ACGIH TLV/TWA: | None Established. |

| POTENTIAL ROUTE [S] OF ENTRY | |
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| Inhalation [Breathing]: | Dust may cause irritation to upper respiratory tract. |
| Dermal [Skin]: | Contact with broken skin may cause burning, blistering, and tissue destruction if not washed off immediately. |
| Eyes: | Irritating to the eyes. Corrosive. May cause permanent eye damage. |
| Ingestion: | Not anticipated. |

| CARCINOGENIC [CANCER POTENTIAL] INFORMATION | |
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| National Toxicological Program [NTP] <i>Sixth Annual Report on Carcinogens:</i> | Not listed. |
| International Agency for Research on Cancer [IARC] <i>Monographs, V. 1-53, Supps. 1-8:</i> | Not listed. |
| Listed by Federal OSHA as Carcinogens: | Not listed. |
| <p>Safe Drinking Water and Toxic Enforcement Act of 1986 [Proposition 65, California only]: Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level.</p> <p>This warning is provided pursuant to Proposition 65, the Safe Drinking Water and Toxic Enforcement act of 1986, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals “known to the state to cause cancer or reproductive toxicity.” This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California’s Office of Environmental Health Hazard Assessment at http://www.oehha.ca.gov. There are over 700 chemical substances on this list.</p> | |

| GENERAL PRECAUTIONS FOR SAFE USE AND HANDLING |
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| Mix only with water. Do not mix with other chemicals. Use clean, dry utensils when mixing. Do not add this product to any dispensing device containing remnants of other products. A violent reaction or explosion may result when chemicals are mixed. Do not contaminate with moisture, other chemicals, or human wastes. Do not mix with ammonia, acids, combustible materials, or reducing agents. |

| PERSONAL PROTECTION AND HYGIENE |
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| Wear goggles or face shield and rubber gloves when handling. Avoid breathing dust. Remove and wash contaminated clothing before reuse. Wash hands after handling. |

| CLEAN-UP OF SPILLS | |
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| Granules should be kept in tightly closed container when not in use in a cool, dry, ventilated area. Spilled materials should be picked up and placed in a dry container. If granules are contaminated by water or other chemicals, or human waste, place in a bucket with lots of clean water. Dissolved granules may be used on site in pool or spa for disinfection or disposed of in an approved landfill. Small quantities of granules or solution made from granules may be discharged into a sanitary sewer. Granules must be disposed of in accordance with Federal, State, and/or local laws and regulations. Read the label for additional information. Contact HASA, Inc. for guidance. | |

| FIRST AID | |
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| Eye Contact: | Flush with water. Remove contact lenses [if applicable]. Hold eyelids open. Continue flushing with water for 15 minutes. Get prompt medical attention. |
| Skin Contact: | Brush off any residue. Wash affected area with water for 15 minutes. If irritation persists, get medical attention. |
| Ingestion [swallowing]: | Feed bread soaked in milk followed by olive oil or other cooking oil. Call a physician immediately. |
| Inhalation: | Remove to fresh air. If not breathing, give artificial respiration [preferably mouth-to-mouth]. If breathing is difficult, give oxygen. Call a physician. |

| FEDERAL/STATE LISTS/REGISTRATION/S/REPORTING REQUIREMENTS | |
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| CERCLA Hazardous Substance [Section 1010 [4], P.L. 96-510]: | RQ=10 pounds [28.5 lbs based on active ingredient] |
| Extremely Hazardous Substance [40 CFR 355, Appendix A]: | Not listed. |
| Pesticide Product 7 U.S.C. 136 et seq.: | Registered as Pesticide Product by Federal EPA. |
| Toxic Substance under TSCA: | Not reported. |
| Pesticide Product [various State Laws]: | Registered as Pesticide Product |

| MATERIAL CLASSIFICATION | |
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| OSHA Hazard Communication Standard, Department of Labor, Occupational Safety and Health Division, 29 CFR 1910.1200: | Oxidizer |

| Hazardous Materials Transportation Regulations, Department of Transportation (Federal) 49 CFR 172.101 | |
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| < than 2.2 kg/container: | Consumer Commodity, ORM-D |
| > than 2.2 kg/container: | |
| Material Class [Division]: | 5.1 |
| Packaging Group: | II |
| UN/NA Number: | 2880 |
| Label: | Oxidizer 5.1 |
| Placard: | Oxidizer 5.1 |
| Proper Shipping Name: | Calcium hypochlorite, hydrated |

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| National Fire Protection Association NFPA 704 [1990]: | 1-0-2-OXY |
| BOCA National Fire Prevention Code/National Building Code [1999 editions]: | Oxidizer Class 3, Unstable [reactive] Class 1 |
| Standard Fire Prevention Code/Standard Building Code [1997 editions]: | Oxidizer Class 3, Unstable [reactive] Class 1 |
| Uniform Fire Code/Uniform Building Code [1997 editions]: | Oxidizer Class 3, Unstable [reactive] Class 1 |
| Uniform Fire Code Standards 79-3, Uniform Fire Code, V. II [1997 edition]: | 1-0-2-OXY |

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