



HASA HYDROGUARD CHLORINATING GRANULES


Safety Data Sheet

Emergency 24 Hour Telephone: **CHEMTREC 800.424.9300**

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SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1	Product Identification:	
1.1.1	Product Name:	HASA HYDROGUARD CHLORINATING GRANULES
1.1.2	CAS # (Chemical Abstracts Service Registry Number):	51580-86-0
1.1.3	RTECS (Registry of Toxic Effects of Chemical Substances):	XZ1900000
1.1.4	EINECS (European Inventory of Existing Commercial Substances):	220-767-7
1.1.5	Chemical Name:	Sodium dichloroisocyanurate dihydrate
1.1.6	Chemical Formula:	$C_3O_3N_3Cl_2Na \cdot 2H_2O$
1.1.7	Synonym:	Dry Chlorinating Compound; DiChlor; Granular Chlorinating Compound; Sodium dichloroisocyanuric acid; sodium dichloro-s-triazinetrione; Dichloroisocyanuric acid.
1.1.8	Chemical Family:	Halogenated Triazines.
1.2	Recommended Uses:	Sanitizing agent for pool and spa water.
1.3	Company Identification:	Hasa Inc. P. O. Box 802736 Santa Clarita, CA 91355
1.4	Emergency Telephone:	CHEMTREC: 1-800-424-9300 (24 hour)
1.5	Non-Emergency Assistance:	661-259-5848 (8 AM – 5 PM PST / PDT)

SECTION 2: HAZARD(S) IDENTIFICATION		
HEALTH HAZARD	Skin corrosion / irritation	Category 1
	Acute Toxicity - Inhalation	Category 2
	Acute Toxicity - Oral	Category 4
	Specific Target Organ Toxicity	Category 3
ENVIRONMENTAL HAZARD	Hazardous To Aquatic Environment – Acute Hazard	Category 1
	Hazardous To Aquatic Environment - Chronic Hazard	Category 1
SYMBOLS		
SIGNAL WORD	DANGER	
HAZARD STATEMENT	<p>Causes severe skin burns and eye damage. Fatal if inhaled. Harmful if swallowed. May cause respiratory irritation. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.</p>	
PRECAUTIONARY STATEMENT	Prevention	
	<p>Do not breathe dust/fume/gas/mist/vapor/spray. Use only outdoors or in a well-ventilated area. In case of inadequate ventilation, wear respiratory protection. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Avoid release to the environment.</p>	
	Response	
	<p>If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If swallowed: Rinse mouth. Do NOT induce vomiting. Call a poison center or doctor if you feel unwell. Collect spillage.</p>	
	Storage and Disposal	
<p>Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of container/contents in accordance with local, regional, national, international regulations as specified.</p>		

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

	Ingredient	CAS No.	Weight %
3.1	Sodium dichloroisocyanurate dihydrate	51580-86-0	98-100%
3.2	Sodium chloride	7647-14-5	0.1-1.0%

SECTION 4: FIRST AID MEASURES

4.1	IF IN EYES	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
4.2	IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
4.3	IF INHALED	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
4.4	IF SWALLOWED	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: FIRE FIGHTING MEASURES

5.1	Extinguishing Media:	Flood with copious amounts of water. Do not use ABC fire extinguishers. Do not use dry chemicals, carbon dioxide, or halogenated extinguishing agents.
5.2	Fire/Explosion Hazards:	Negligible fire hazard. If heated by outside sources above 240°C (464°F) this product will undergo decomposition with the evolution of noxious gases but no visible flame. Wet materials may generate nitrogen trichloride, an explosion hazard.
5.3	Fire Fighting Procedures:	Consider evacuation of personnel located downwind. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. DO NOT attempt to reseal contaminated drums. Damp material should be neutralized to a non-oxidizing state.
5.4	Flammable Limits:	No information available.
5.5	Products of Combustion:	When heated to decomposition it emits very toxic fumes of chlorine and nitrogen oxides.
5.6	Fire Hazards in Presence of Various Substances:	Do not mix with other chemicals. Keep combustibles away from this product.
5.7	Sensitivity to Impact or Static Discharge:	Not sensitive.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal Precautions:	Keep unnecessary and unprotected persons away. Isolate hazard area and deny entry. Do not get in eyes, on skin or on clothing. Do not breathe dust, fume, gas, mist, vapors, or spray. Wear appropriate personal protective equipment recommended in Section 8, Exposure Controls / Personal Protection, of the SDS.
6.2	Methods and Materials for Containment and Cleaning Up:	DO NOT add water to spilled material. DO NOT use floor sweeping compounds to clean up spills. Sweep and scoop spilled material into clean, dedicated equipment. Every attempt should be made to avoid mixing spilled material with other chemicals or debris when cleaning up. DO NOT attempt to reseal contaminated drums. DO NOT transport wet or damp material. Damp material should be neutralized to a non-oxidizing state.
6.3	Environmental Precautions:	This material is very toxic to aquatic life. This material is very toxic to aquatic life with long lasting effects. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

SECTION 7: HANDLING AND STORAGE

7.1	Handling:	Do not get in eyes, on skin, or on clothing. Avoid breathing vapors or dust when opening container. Avoid creation of dust. Wash thoroughly after handling. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the SDS. NEVER add water to this product. Always add product to large quantities of water. Use clean, dry utensils. Do not add the product to any dispensing device containing residuals of other products.
7.2	Storage:	<p>Store and handle in accordance with all current regulations and standards. (NFPA Oxidizer Class 1). Do not allow water to get in container. If liner is present, tie after each use. Keep container tightly closed and properly labeled.</p> <p>Store containers on pallets. Keep away from food, drink and animal feed. Keep separated from incompatible substances (see below or Section 10 of the Safety Data Sheet). Product has an indefinite shelf life if stored in original container in a cool, dry place.</p>

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1	Engineering Controls:	<p>Use only in well-ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.</p> <p>Chlorine and chlorine compounds may be found in slight amounts in the head space of containers of this product.</p>
8.2	Personal Protection:	
	8.2.1 Eyes and Face:	Wear chemical safety glasses with side-shields. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
	8.2.2 Respiratory:	A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. The added protection of a full face piece respirator is required when visible dusty conditions are encountered and eye irritation may occur. Acid gas cartridges with N95 filters are required when fumes or vapor may be generated. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.
	8.2.3 Skin & Body:	Wear appropriate chemical resistant gloves. Wear protective clothing to minimize skin contact. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Contaminated clothing should be removed and laundered before reuse.
8.3	Protective material type:	Butyl rubber, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC), Tyvek®
8.4	Exposure Limits:	This product does not contain any components that have regulatory occupational exposure limits (OEL's) established.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	White crystalline granules.
9.2	Odor:	Slight odor of chlorine.
9.3	Odor Threshold:	Not reported.
9.4	pH:	6-7 @ 25 °C (77 °F) (1% solution)
9.5	Melting Point:	Decomposes without melting @ 252 °C (486 °F)
9.6	Freezing point:	Not applicable.
9.7	Boiling Point & Boiling Range:	Not applicable.
9.8	Flash Point:	No information available.
9.9	Evaporation Rate:	Not applicable.
9.10	Flammability (solid, gas):	Strong oxidizer. May intensify fire.
9.11	Upper / Lower Flammability or Explosive Limits:	No information available.
9.12	Vapor Pressure:	No information available.
9.13	Vapor Density:	No information available.
9.14	Relative Density (Specific Gravity):	56-60 lbs/ft ³ (loose)
9.15	Solubility in Water:	26.5g/100g of water.
9.16	Auto-ignition Temperature:	No information available.
9.17	Decomposition Temperature:	252 °C (486 °F).
9.18	Molecular Weight:	256 g/mole.
9.19	Partition Coefficient (n-octanol / water):	Kow = 0
9.20	Viscosity:	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1	Stability:	Stable at normal temperatures and pressures.
10.2	Reactivity:	Not reactive under normal temperatures and pressures.
10.3	Possibility of Hazardous Reactions:	Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material. Contact with acids liberates toxic gas.
10.4	Incompatible Materials:	Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.
10.5	Hazardous Decomposition Products:	Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.
10.6	Conditions to Avoid: (e.g., static discharge, shock, or vibration)	None known.
10.7	Hazardous Polymerization:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Eyes, skin, ingestion, dermal absorption.
11.2	Acute Toxicity:	
	11.2.1 Eye Irritation (rabbit):	Corrosive
	11.2.2 Dermal Irritation (rabbit):	Corrosive
	11.2.3 Dermal LD₅₀ (rabbit):	>2 g/kg
	11.2.4 Oral LD₅₀ (rat):	1823 mg/kg
	11.2.5 Inhalation LC₅₀ (rat):	0.27 to 1.17 mg/L (4 hours)
11.3	Target Organs:	Kidneys, liver, respiratory systems, eyes, skin.
11.4	Acute Effects from Overexposure:	
	11.4.1 Eye Contact:	Eye exposures may cause burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of eye.
	11.4.2 Skin Contact:	Exposure to solid along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Dry material is less irritating than wet material. This material is not a skin sensitizer based on studies with guinea pigs.
	11.4.3 Inhalation:	This material in the form as sold is not expected to produce respiratory effects. Particles of respirable size are generally not encountered. The respirable fraction is typically less than 0.1% by weight for the granular and extra granular grades. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. Exposure to the solid product or to free chlorine evolving from the product may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.
	11.4.4 Ingestion	Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to epiglottis, mucus membranes of the mouth, esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.
11.5	Chronic Effects from Overexposure:	None identified for the parent chemical. Based on animal studies, exposure to concentrations of monosodium cyanurate at the solubility limit may cause cardiovascular, kidney and urinary bladder effects.
11.6	Carcinogenic [Cancer Potential] Information:	
	11.6.1 NTP (National Toxicological Program 6 th Annual Report on Carcinogens):	Not Listed.
	11.6.2 IARC (International Agency for Research on Cancer Monographs, V. 1-100):	Not Listed.
	11.6.3 OSHA:	Not Listed.

SECTION 12: ECOLOGICAL INFORMATION

12.1	Ecotoxicity:	FIFRA PR Notice 93-10: This product is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water board or Regional Office of the EPA.
12.2	Aquatic Toxicity:	
	12.2.1 Fish (LC ₅₀)	Bluegill sunfish: 0.25-1.0 mg/L (96 hour) Rainbow trout: 0.13-0.36 mg/L (96 hour) Inland silversides: 1.21 mg/L (96 hour)
	12.2.2 Invertebrate (LC ₅₀)	Water flea: 0.196 mg/L (48 hour) Mysid shrimp: 1.65 mg/L (96 hour)
12.3	Avian Toxicity:	
	12.3.1 Bobwhite quail:	LD ₅₀ N. Bobwhite Quail (oral): 1,732 mg/kg LD ₅₀ N. Bobwhite Quail (diet): >10,000 ppm
	12.3.2 Mallard duck:	LD ₅₀ Mallard duck (oral): 1,916 mg/kg LD ₅₀ Mallard duck (diet): >10,000 ppm
12.4	Biodegradation:	This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.
12.5	Persistence:	This material is believed not to persist in the environment. Free available chlorine is rapidly consumed by reaction with organic and inorganic materials to produce chloride ion. The stable degradation products are chloride ion and cyanuric acid.
12.6	Bioconcentration:	This material hydrolyses in water liberating free available chlorine and cyanuric acid. These products are not bioaccumulative.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste from material:	Use or reuse if possible. This material is a registered pesticide. May be subject to disposal regulations. Dispose in accordance with all applicable regulations. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. DO NOT transport wet or damp material. Damp material should be neutralized to a non-oxidizing state.
13.2	Waste Classifications:	If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as hazardous waste under Subpart D.
13.3	Container Management:	See product label for container disposal information. Dispose of container in accordance with applicable local, regional, national, and/or international regulations. Container rinsate must be disposed of in compliance with applicable regulations.

SECTION 14: TRANSPORT INFORMATION		
14.1	US D.O.T.	Non bulk packaging is NOT regulated. Notes: DOT defines the term marine pollutant at 49 CFR 171.8 . Materials listed in Appendix B of 49 CFR 172.101 are regulated as marine pollutants, depending on their concentration: >1% for severe marine pollutants, or >10% for marine pollutants. For ground shipments only, non-bulk packages containing marine pollutants are not regulated as marine pollutants according to 49 CFR 171.4 .
14.2	Bulk Packaging	Regulated as following:
	14.2.1 Shipping Name:	Environmentally Hazardous Substance, Solid, n.o.s. (Sodium dichloroisocyanurate dihydrate), Marine Pollutant
	14.2.2 UN ID Number:	UN 3077
	14.2.3 Hazard Class:	9
	14.2.4 Marking:	Marine Pollutant
	14.2.5 Packing Group:	PG III
	14.2.6 Marine Pollutant:	Sodium dichloroisocyanurate dihydrate
14.3	IMO (International Maritime Organization)	Dangerous Goods
	14.3.1 Shipping Name:	Environmentally Hazardous Substance, Solid, n.o.s. (Sodium dichloroisocyanurate dihydrate), Marine Pollutant
	14.3.2 UN ID Number:	UN 3077
	14.3.3 Hazard Class:	9
	14.3.4 Marking:	Marine Pollutant
	14.3.5 Packing Group:	PG III
	14.3.6 Marine Pollutant:	Sodium dichloroisocyanurate dihydrate
14.4	Canadian TDG (Transportation of Dangerous Goods):	
	Non-Bulk Packaging: Not Regulated unless transported by vessel. Bulk Packaging or Shipment by Vessel: Regulated as following:	
	14.4.1 Shipping Name:	Environmentally Hazardous Substance, Solid, n.o.s. (Sodium dichloroisocyanurate dihydrate), Marine Pollutant
	14.4.2 UN ID Number:	UN 3077
	14.4.3 Hazard Class:	9
	14.4.4 Marking:	Marine Pollutant
	14.4.5 Packing Group:	PG III
	14.4.6 Marine Pollutant:	Sodium dichloroisocyanurate dihydrate

SECTION 15: REGULATORY INFORMATION

15.1	U.S. Regulations:	
15.1.1	OSHA HAZCOM (Hazard Communication)	This material is considered hazardous by the HAZCOM Standard (29 CFR 1910.1200)
15.1.2	OSHA PSM (Process Safety Management)	Not regulated under PSM Standard (29 CFR 1910.119)
15.1.3	EPA FIFRA (Federal Insecticide, Fungicide and Rodenticide Act)	EPA Reg. No. :10897-7 (Registered pesticide under 40 CFR 152.10)
15.1.4	EPA EPCRA (Emergency Planning and Community Right-to-Know Act)	Section 302 – TPQ: not listed. Section 304 - RQ: not listed. Section 313 – not on TRI list.
15.1.5	EPA SARA (Superfund Amendments and Reauthorization Act) Title III (Section 311/312)	Acute: Yes Chronic: No Fire: Yes Reactive: Yes Sudden Release: No
15.1.6	SARA Title III (Section 313)	This product does not contain a chemical listed at or above de minimis concentrations.
15.1.7	EPA TSCA (Toxic Substance Control Act)	All components are listed or exempted. TSCA 12(b): This product is not subject to export notification.
15.1.8	EPA CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)	102a/103 Not regulated
15.1.9	EPA RMP (Risk Management Plan)	Not regulated. (40 CFR 68.130)
15.1.10	FHSA (Federal Hazardous Substances Act):	Complies.
15.2	State of California Regulations:	
15.2.1	CDPR (California Department of Pesticide Regulation)	Reg. No.10897-7-ZA
15.2.2	CalARP (California Accidental Release Prevention Program)	Not regulated.
15.2.3	California Proposition 65 (State Drinking Water and Toxic Enforcement Act)	This product and its ingredients are not listed, but it may contain impurities/trace elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65
15.3	Canada Regulations:	
15.3.1	WHMIS (Workplace Hazardous Materials Information System) Classification:	Material is regulated as a pesticide, therefore is not regulated under WHMIS.
15.3.2	Canada DSL (Domestic Substances List)	All components of this product are on the DSL.
<p><i>Note: Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed above should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.</i></p>		

SECTION 16: OTHER INFORMATION		
16.1	HMIS III (Hazardous Materials Identification System):	
16.1.1	HEALTH	3
16.1.2	FLAMMABILITY	0
16.1.3	PHYSICAL HAZARD	1
16.1.4	PERSONAL PROTECTION:	Section 8
16.2	NFPA 704 (National Fire Protection Association):	
16.2.1	HEALTH	2
16.2.2	FLAMMABILITY	0
16.2.3	REACTIVITY	1
16.2.4	SPECIAL	OX
16.2.5	NFPA Classification	Class 1 Oxidizer
16.3	ANSI (American National Standards Institute):	
16.3.1	Hazardous Industrial Chemicals - Material Safety Data Sheets-Preparation:	Complies with ANSI Z400.1 – 2004.
16.3.2	Hazardous Industrial Chemicals - Precautionary Labeling:	Complies with ANSI Z129.1 – 2006.



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