

MSDS Document

Product CHLORINATING STICKS

1. Chemical Product and Company Identification

Trade Name of this Product CHLORINATING STICKS

MSDS ID MSDS0515

Manufacturer

Haviland Consumer Products, Inc.
421 Ann Street N.W.
Grand Rapids, MI 49504

Phone Number

(616) 361-6691

Emergency Phone

CHEMTREC (800) 424-9300

CHEMTREC International (703) 527-3887

Revision Date 00/00/00

Health:	3
Fire:	0
Reactivity:	2
Specific	

2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Trichloroisocyanuric acid	87-90-1	99 %	0.5 ppm Cl. gas	Not Established	1 ppm Cl. gas

3. Hazard Identification

Emergency Overview

Harmful by ingestion. Causes burns in contact with the skin and eyes.

Health Effects

Contact with the skin may cause redness, strong burning sensation, with eventual ulceration. Contact with the eyes may cause pain and tears. Impaired vision. Ingestion may cause abdominal pain, nausea, general weakness. Inhalation may cause sore throat, cough, nausea.

Carcinogenicity

None of the components present in this material are listed by IARC or NTP as a carcinogen.

Reproductive Effects

None known

Routes of Entry

Inhalation, Ingestion, Skin or Eye Contact

4. First Aid Information

Skin Contact

Flush with water for at least 15 minutes while removing contaminated clothing. If irritation persists, get medical attention.

Eye Contact

Flush immediately with plenty of water for at least 15 minutes, get medical attention.

Ingestion

Call a physician immediately. Do not induce vomiting. Dilute by drinking water or milk. Never give anything by mouth to an unconscious person.

Inhalation

Fresh air should alleviate any respiratory discomfort. If breathing difficulties develop or persist, get medical attention.

5. Fire Fighting Measures

Flash Point N/A

Extinguishing Media

Use water. Do not use dry chemical extinguisher containing ammonia compounds.

Special Fire Fighting Procedures

Material does not burn but is an oxidizing agent and will support combustion of other materials. Use breathing apparatus and protective clothing. Use flooding amounts of water.

Unusual Fire Hazard

None known.

6. Accidental Release Measures

Spill and Leak Procedures

Sweep and fully collect the spilled product. If there is some non-polluted product left, separate it from the rest and collect it into a clean container with inner plastic bag. Contaminated product must be destroyed.

7. Handling and Storage

Handling Procedures

Use with adequate ventilation. Avoid breathing dusts. Do not get in eyes, on skin, or on clothing. Wear eye protection and protective clothing. Wash thoroughly after handling.

Storage Procedures

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Avoid dust formation and control ignition sources.

8. Exposure Controls and Personal Protection

Engineering Controls

Use in well ventilated areas.

Eye Protection

Chemical safety goggles

Protective Gloves

Rubber or other impervious materials.

Respiratory Protection

When conditions cause excessive airborne levels of dusts, use NIOSH-approved respiratory equipment with full mask equipped with suitable filter (combined for dust and halogens).

Other Protective Equipment

Flowing water source should be available. Prevent contact with skin & clothing by using protective garments.

9. Physical and Chemical Properties

Physical State	Solid
Color/Appearance	White powder compressed into sticks
Odor	Slight chlorine odor
pH	2.7 - 3.3 (1% solution)
Boiling/Cond. Point	Not Applicable
Melting/Freezing Point	225°C (decomposes)
Solubility	12 g/liter @ 25°C
Vapor Density	Not Applicable
Vapor Pressure	Not Applicable

10. Stability and Reactivity

Chemical Stability

Stable under normal conditions

Conditions to Avoid

Humidity and temperatures over 40°C.

Incompatible Materials

Product attacks metals in general. It reacts with water, oxidant and reducing agents, acids, alkalis, nitrogen products, ammonium salts, urea, amines, quaternary ammonium derivatives, oils, fats, peroxides, cationic tensioactives, etc.

Hazardous Decomposition Products

In combination with the above mentioned products, it decomposes and gives off a great quantity of heat, chlorine, nitrogen trichloride, chlorine oxides, etc. with subsequent danger

of explosion.

Hazardous Polymerization

Will not occur.

11. Toxicological Information

Acute LD50 oral rat: 406 mg/kg

12. Ecological Information

Toxic for fish and algae. Do not pour directly to rivers, lakes, etc. Product hydrolyses in diluted aqueous solution giving off hypochlorous and cyanuric acids. The first one is transformed into chloride with time and the action of the sun rays. The second one is biodegradable and practically non toxic. Therefore, the diluted solution can be directly poured to the sewer system, depending on the applicable local regulations, provided the chlorine content is of 0 ppm.

13. Disposal Considerations

Waste Disposal

Add 2.5 kg of sodium carbonate to 10 liters of water, stir and dissolve. Slowly (in about 0.5 hours) add 1 kg of product. Let stand for at least 10 hours. Slowly add (in about 0.5 hours) while stirring 0.5 kg of sodium sulphite. Then check if there is some free-chlorine left. If necessary add more sodium sulphite until chlorine value is 0. Neutralize if necessary. The above operations should be carried out in the open air wearing suitable equipment, as chlorine gas may be released.

The waste obtained, diluted in a great quantity of water can be poured to the sewer, according to the local regulations, as it only contains a mixture of salts and cyanuric acid which is biodegradable. Another disposal method for dry product is by incineration mixing product with solvents. The incinerator should be provided with a washing system for chlorine combustion gases. Disposal of product should be carried out according to local, state, and federal regulations on industrial waste disposal.

14. Transportation Information

DOT Shipping Name

Trichloroisocyanuric acid, dry

Hazard Class

5.1, Oxidizer

UN Number

UN2468

Packing Group

PG II

15. Regulatory Information

TSCA

Hazardous Component(s) subject to reporting on the TSCA List.

WHMIS

Hazardous Component(s) subject to WHMIS Ingredient Disclosure.

16. Other Information

EPA Reg. No. 57787-1

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