

Chlorinating Tablets

89195-1

MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: 1-JAN-2011

PRINTED DATE: 1-JAN-2011

SUPERCEDES:

1) Identification

Identification of substance or preparation
CHLORINATING TABLETS

Product Application Area
CHLORINATING TABLET

Company/Undertaking Identification
H2O Chlorination
3643 450th Avenue, Emmetsburg, IA 50536
T 888-307-6114 F 712-852-3172

Emergency Telephone
Chemtel: 1-800-255-3924

Contract # MIS0006729

2) HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

Moderately irritating. May be corrosive in contact with moist skin.
Corrosive to the eyes. Dusts cause irritation to the upper
respiratory tract.

DOT hazard: Oxidizer

Odor: Chlorine; Appearance: White To Yellow, Pellet

Fire fighters should wear positive pressure self-contained breathing
apparatus (full face-piece type). Proper fire-extinguishing media:
Flood with water. Use of CO2 or foam may not be effective.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Moderately irritating. May be corrosive
in contact with moist skin.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Dusts cause irritation to the upper
respiratory tract.

INGESTION EFFECTS:

May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in very large doses.

TARGET ORGANS:

Prolonged or repeated exposures may cause tissue necrosis and/or toxicity to the lung.

MEDICAL CONDITIONS AGGRAVATED:

Respiratory ailments.

SYMPTOMS OF EXPOSURE:

Inhalation of dusts may cause irritation and/or burns to the respiratory tract. Skin contact can cause moderate irritation to burns (dependent on length of exposure).

3) COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
7778-54-3	CALCIUM HYPOCHLORITE (HTH) Oxidizer; corrosive; toxic (by ingestion- dust); IARC=3 (carcinogen status not classifiable)	60-100
1305-62-0	CALCIUM HYDROXIDE Corrosive (eyes and respiratory); severe irritant, possibly corrosive(skin)	1-5
471-34-1	CALCIUM CARBONATE Nuisance particulate	1-5
10043-52-4	CALCIUM CHLORIDE Irritant (eyes)	0.5-1.5

4) FIRST-AID MEASURES

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with plenty of low-pressure water for at least 20 minutes while removing contact lenses. Hold eyelids apart. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Rinse mouth with plenty of water. Dilute contents of stomach using 4-10 fluid ounces (120-300 mL) of milk or water.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage.

5) FIRE-FIGHTING MEASURES

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

Flood with water. Use of CO2 or foam may not be effective.

HAZARDOUS DECOMPOSITION PRODUCTS:

hydrogen chloride and chlorine

FLASH POINT:

> 213F > 101C P-M(CC)

MISCELLANEOUS:

Oxidizer

UN 2880;Emergency Response Guide #140

6) ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Sweep up and remove. Minimize dust generation.

DISPOSAL INSTRUCTIONS:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Dispose of in approved pesticide facility or according to label instructions.

7) HANDLING AND STORAGE

HANDLING:

Oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Corrosive to skin and/or eyes.

STORAGE:

Keep containers closed when not in use. Keep dry. Shelf life 360 days.

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS

CHEMICAL NAME

CALCIUM HYPOCHLORITE (HTH)

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

CALCIUM HYDROXIDE

PEL (OSHA): 5 MG/M3
TLV (ACGIH): 5 MG/M3

CALCIUM CARBONATE

PEL (OSHA): 15 MG/M3-TOTAL (5MG/M3-RESPIRABLE)
TLV (ACGIH): 10 MG/M3

CALCIUM CHLORIDE

PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29CFR 1910 Subpart I
RESPIRATORY PROTECTION:

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

gauntlet-type neoprene gloves, chemical resistant apron--
Wash off after each use. Replace as necessary.

EYE PROTECTION:

face shield, airtight chemical goggles

9) PHYSICAL AND CHEMICAL PROPERTIES

Density	70.000 lb/cu.	Vapor Pressure (mmHG)	< 1.0
Freeze Point (F)	NA	Vapor Density (air=1)	< 1.00
Freeze Point (C)	NA		
Viscosity(cps 70F,21C)	NA	% Solubility (water)	18.0

Odor	Chlorine
Appearance	White To Yellow
Physical State	Pellet
Flash Point	P-M(CC) > 213F > 100C
pH 1% Sol. (approx.)	11.0
Evaporation Rate (Ether=1)	< 1.00
Percent VOC:	0.0

NA = not applicable ND = not determined

10) STABILITY AND REACTIVITY

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Shock, friction, heat or other sources of ignition may cause a violent reaction releasing heat and toxic fumes. Contact with

reducing agents or flammable/combustible material may cause fire or explosion.

INCOMPATIBILITIES:

May react with organics or reducing agents.

DECOMPOSITION PRODUCTS:

hydrogen chloride and chlorine

11) TOXICOLOGICAL INFORMATION

Oral LD50 RAT:	850 mg/kg
Dermal LD50 RABBIT:	>2,000 mg/kg
Inhalation LC50 RAT:	1,700 mg/m3/hr
Skin Irritation Score RABBIT:	8
Eye Irritation Score RABBIT:	98.5
Ames Assay BACTERIA:	POSITIVE
Non-Ames Mutagenicity:	pos/neg

NOTE - Negative: In Vivo Mouse Micronucleus; positive: In Vitro Chromosomal Aberration

12) ECOLOGICAL INFORMATION

AQUATIC TOXICOLOGY
No Data Available.

BIODEGRADATION
No Data Available.

13) DISPOSAL CONSIDERATIONS

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
D001=Ignitable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14) TRANSPORT INFORMATION

DOT HAZARD:	Oxidizer
PROPER SHIPPING NAME:	CALCIUM HYPOCHLORITE, HYDRATED 5.1, UN2880, PG II

DOT EMERGENCY RESPONSE GUIDE #: 140

Note: Some containers may be DOT exempt, please check BOL for exact container classification

15) REGULATORY INFORMATION

TSCA:

This is an EPA registered biocide and is exempt from TSCA inventory requirements.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

14 lbs due to CALCIUM HYPOCHLORITE (HTH);

FIFRA REGISTRATION NUMBER:

50510-1

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: Not Registered

SARA SECTION 312 HAZARD CLASS:

Immediate (acute); Delayed (Chronic); Fire

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:

No regulated constituent present at OSHA thresholds

CALIFORNIA REGULATORY INFORMATION

CALIFORNIA SAFE DRINKING WATER AND TOXIC
ENFORCEMENT ACT (PROPOSITION 65):

No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16) OTHER INFORMATION

HMIS VII

CODE TRANSLATION

Health	3	Serious Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	OXY	DOT or NFPA Oxidizer
(1) Protective Equipment	D	Goggles, Face Shield, Gloves, Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
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MSDS status:		** NEW **