S A F E T Y D A T A S H E E T

® Madison Chemical Co., Inc.

3141 Clifty Drive ● Madison, IN 47250

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

NAME: **MACHINE-GARD® CH**

TYPE: **Chlorinated Alkaline Cleaner**

PRODUCT # **769201**

FOR INDUSTRIAL USE ONLY – KEEP OUT OF THE REACH OF CHILDREN

EMERGENCY RESPONSE INFORMATION:

CHEMTREC	800-424-9300	24-Hour Service
Company Offices:	812-273-6000	Weekdays
Cara Cyrus:	812-599-3611	Evenings and Weekends
Bill Torline:	812-599-4976	Evenings and Weekends

PREPARED DATE: 10-13-16 **PREPARED BY:** Natalie Green

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Corrosive to Metals	Category 1	H290
Acute Toxicity, oral	Category 4	H302
Skin Corrosion/Irritation	Category 1A	H314
Serious Eye Damage/Eye Irritation	Category 1	H318
Aquatic Toxicity (Chronic)	Category 3	H413

Signal Word DANGER

Symbol

Hazard Statements

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary Statements

P234 Keep only in original container.
P264 Wash hands, forearms, and exposed areas thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear eye protection, face protection, protective clothing, protective gloves.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower
P304 + P340 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see Section 4).
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.

Precautionary Statements continued	P405	Store locked up.
	P406	Store in corrosive resistant container with a resistant inner liner.
	P501	Dispose of contents / container according to local, regional, national and international regulations.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	SYNONYM	CAS NO.	% BY WEIGHT
Potassium hydroxide	Caustic potash	1310-58-3	10 - 20
Sodium hypochlorite	None	7681-52-9	1 – 10

If Chemical Name/CAS No is "proprietary" and/or % By Weight is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

EYES: Immediately flush with large quantities of cool water continuously for at least 15 minutes. Call a physician.

SKIN: Immediately flush with large quantities of cool water continuously for at least 15 minutes. Call a physician. Remove contaminated clothing and shoes. Do not put contaminated clothing and shoes back on. Wash clothing and shoes thoroughly in soap and water; rinse repeatedly in clean water and dry before reuse.

INGESTION: If conscious, immediately give large quantities of water. DO NOT INDUCE VOMITING. Call a physician at once. DO NOT give anything by mouth if the person is unconscious or if having convulsions.

INHALATION: Remove subject to fresh air. Give artificial respiration if necessary. Get medical attention immediately.

SIGNS AND SYMPTOMS OF EXPOSURE: Contacted areas will exhibit irritation or burns. Burns may not be immediately apparent. Eye contact may cause permanent injury, including blindness. If ingested, may cause nausea and vomiting. May act as a sensitizer.

PRIMARY ROUTE(S) OF ENTRY: Eyes, skin, inhalation.

MOST IMPORTANT SYMPTOMS / EFFECTS, ACUTE AND DELAYED:

EYE CONTACT: Causes serious eye damage.

SKIN CONTACT: Corrosive. Causes burns.

INGESTION: May be fatal if swallowed.

INHALATION: Causes burns to alimentary canal and mucous membranes..

CHRONIC SYMPTOMS: None expected under normal conditions of use.

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:

If you experience any of the symptoms / effects listed above seek medical advice.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Use extinguishing media as appropriate for surrounding fire.

SPECIFIC HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Not considered flammable or explosive. Hazardous reactions will not occur under normal conditions.

ADVICE FOR FIRE FIGHTERS:

Wear self-contained breathing apparatus and full protective clothing. Use water spray to keep containers cool. **Hazardous Combustion Products:** Chlorine gas, carbon monoxide, carbon dioxide.

Chlorine gas is an oxidizer and will support combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Avoid all contact with skin, eyes and clothing. Avoid breathing. Wear nitrile, neoprene, or natural rubber gloves. Goggles and faceshield necessary. Wear suitable protective clothing. Use NIOSH / MSHA approved positive pressure self-contained breathing apparatus when any material is involved in a fire.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Contain liquid spills with sand and absorb on inert material such as Hazorb or clay. Dispose with solid waste. See Waste Disposal Method. Avoid breathing vapors. Ventilate areas. Do not discharge to sewers or waterways without proper treatment.

SAFETY DATA SHEET

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:
Wear proper safety equipment when handling this product. Handle in accordance with good industrial hygiene and safety procedures.

CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:
Store in a cool, dry area away from heat and direct sunlight to avoid deterioration. Store away from acids and reducing agents. Keep container closed when not in use. Keep from freezing.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

CHEMICAL IDENTITY	CAS NO.	OSHA PEL	ACGIH TLV
Potassium hydroxide	1310-58-3	N.E.	2 mg / M^3*
Sodium hypochlorite	7681-52-9	N.E.**	N.E.**

*Denotes ceiling limit. **Manufacturer recommends a ceiling limit of 0.5 ppm.

ENGINEERING CONTROLS: Use good ventilation. Local exhaust is recommended if TLVs are exceeded.

INDIVIDUAL PROTECTION MEASURES: Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

RESPIRATORY PROTECTION: In absence of proper environmental control, use NIOSH / MSHA approved positive pressure supplied air respirator for mists where airborne exposure is excessive.

SKIN PROTECTION: Impermeable type rubber gloves. Other equipment as required to avoid contact.

EYE PROTECTION: Goggles and faceshield necessary.

GENERAL HYGIENE CONSIDERATIONS: Eyewash facility and emergency shower should be in close proximity. Always wash hands after handling any chemical.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Off-white liquid.
ODOR:	Mild chlorine
ODOR THRESHOLD:	Not available.
pH (100%):	13.8 – 14.2
MELTING POINT/FREEZING POINT	28°F (-2.2)
INITIAL BOILING POINT AND BOILING RANGE	215°F (101.7°C)
FLASH POINT (METHOD USED)	Not available.
EVAPORATION RATE	Not available.
FLAMMABILITY (SOLID, GAS)	Not available.
UPPER/LOWER FLAMMABLE OR EXPLOSIVE LIMIT	Not available.
VAPOR PRESSURE	Not available.
VAPOR DENSITY	Not available.
SPECIFIC GRAVITY	1.20
SOLUBILITY IN WATER	Complete.
PARTITION COEFFICIENT: N-OCTANOL/WATER	Not available.
AUTO-IGNITION TEMPERATURE	Not available.
VISCOSITY, DYNAMIC	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VISCOSITY	Not available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Will react with acids and ammonia to release toxic chlorine gas.
CHEMICAL STABILITY:	Stable under recommended handling and storage conditions (see Section 7).
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Heat and open flame.
INCOMPATIBLE MATERIALS:	Acids, ammonia, amines, easily oxidized materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	Chlorine gas, carbon monoxide, carbon dioxide

SAFETY DATA SHEET

SECTION 11: TOXOLOGICAL INFORMATION

ACUTE TOXICITY:	Not classified.
LD50 AND LC50 DATA:	Not available.
ROUTES OF EXPOSURE / SYMPTOMS	
EYES:	DANGER! Causes burns.
SKIN:	DANGER! Causes burns.
INGESTION:	WARNING! Harmful if swallowed.
INHALATION:	DANGER! Causes burns to alimentary canal and mucous membranes.
GERM CELL MUTAGENICITY:	Not classified.
TERATOGENICITY:	Not available.
CHRONIC EFFECTS / CARCINOGENICITY:	This material contains no ingredient above de minimus concentrations known or suspected to cause cancer.
SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure):	Not classified.
REPRODUCTIVE TOXICITY:	Not classified.
SPECIFIC TARGET ORGAN TOXICITY (Single exposure):	Not classified.
ASPIRATION HAZARD:	Not classified.
COMPONENT INFORMATION:	
Potassium hydroxide	LD50 Oral Rat: 284 mg/kg LD50 Dermal: No data LC50 Inhalation: No Data
Sodium hypochlorite	LD50 Oral Rat: 8910 mg/kg LD50 Dermal Rabbit: >10,000 mg/m^3 LC50 Inhalation: No data

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	LC50 *Ceriodaphnia dubia*: 85.38 mg/L/48hr
PERSISTENCE AND DEGRADABILITY:	Material is inorganic and not subject to biodegradation.
BIOACCUMULATIVE POTENTIAL:	Not available.
MOBILITY IN SOIL:	Not available.
OTHER ADVERSE EFFECTS:	This material contains no hazardous air pollutants (HAPS).

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD	Normal for alkaline, chlorine and phosphate containing wastes. Sodium metabisulfite may be used to neutralize chlorine. May require pH adjustment for neutralization. Dispose in accordance with local, state and federal regulations.

SECTION 14: TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME:	Corrosive liquid, basic, inorganic, n.o.s. (contains potassium hydroxide, and sodium hypochlorite)
HAZARD CLASS:	8
IDENTIFICATION NUMBER:	UN3266
PACKING GROUP:	III
EMERGENCY RESPONSE GUIDE:	ERG #154

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SECTION 15: REGULATORY INFORMATION

VOC: 0.04 pounds per gallon (5 grams per liter).

TSCA STATUS All ingredients are listed on the TSCA inventory.

CERCLA REPORTABLE QUANTITY
1,000 pounds for potassium hydroxide (approximately 714 gallons)
100 pounds for sodium hypochlorite (approximately 500 gallons)

SARA 311 / 312 HAZARD CLASSES

x	ACUTE HEALTH
	FIRE
	SUDDEN RELEASE OF PRESSURE
	CHRONIC HEALTH
	REACTIVE

SARA 312 INFORMATION Storage of 10,000 pounds or more may require filing a Tier 2 form. Threshold planning quantity for reporting is 10,000 pounds. This material is not an extremely hazardous substance (EHS).

SARA 313 INFORMATION This material contains the following substances subject to the reporting requirements of Section 313 of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

CHEMICAL NAME	CATEGORY CODE	CAS NUMBER	% BY WEIGHT
NONE			

STATE REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65 California has not identified the ingredients listed in Section 3 as known to cause cancer or reproductive toxicity.

SECTION 16: OTHER INFORMATION

SDS STATUS: Revised sections 2, 3, 12, and 16 on 10-13-16.

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0

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