

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



3141 Clifty Drive • Madison, IN 47250

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

NAME:

MACHINE-GARD® SI-W

TYPE:

Acid cleaner

PRODUCT #

725001

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:

10-12-16

PREPARED BY:

Natalie Green

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification	Corrosive to Metals	Category 1	H290
	Acute Toxicity, Inhalation	Category 3	H331
	Skin Corrosion/Irritation	Category 1A	H314
	Serious Eye Damage/Eye Irritation	Category 1	H318
	Carcinogenicity	Category 1A	H350
	Aquatic Toxicity (Acute)	Category 4	H413

Signal Word

DANGER

Symbol



Hazard Statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H350	May cause cancer (Inhalation of mists).
H413	May cause long lasting harmful effects to aquatic life.

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original container.
P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands, forearms, and exposed areas thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear eye protection, face protection, protective clothing, protective gloves.
P281	Use personal protective equipment as required.
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

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Precautionary Statements (cont'd)

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.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see Section 4).
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
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

<u>COMPONENT</u>	<u>SYNONYM</u>	<u>CAS NO.</u>	<u>% BY WEIGHT</u>
Sulfuric acid	None	7664-93-9	10 – 20
Fluorides, as F	None	N.D.	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: Do NOT induce vomiting. Give water. Never give anything by mouth if the person is unconscious or if having convulsions. Call a physician.
INHALATION: Remove subject to fresh air and get medical attention.
PRIMARY ROUTE(S) OF ENTRY: Eyes, skin.
MOST IMPORTANT SYMPTOMS / EFFECTS, ACUTE AND DELAYED:
GENERAL: Causes serious skin burns and eye damage. Toxic if inhaled. May cause cancer by inhalation of mist.
EYE CONTACT: Causes severe damage.
SKIN CONTACT: Will cause skin irritation. Corrosive. Causes severe burns.
INGESTION: May be harmful if swallowed.
INHALATION: May cause nasal and respiratory irritation.
CHRONIC SYMPTOMS: May cause cancer by inhalation of mist.

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:

Product is not explosive, however this product reacts with most metals to release hydrogen gas which can form explosive mixtures with air. Hazardous reactions will not occur under normal conditions. Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter, especially if sprayed into containers of hot liquid.

ADVICE FOR FIRE FIGHTERS:

Wear self-contained breathing apparatus with full face piece operated in positive pressure mode and full body protective clothing. Use water spray to keep containers cool. **Hazardous Combustion Products:** Acid vapors, sulfur oxides, explosive hydrogen gas may be formed by reacting with certain metals.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Avoid all contact with skin, eyes and clothing. Avoid breathing vapors. Wear butyl rubber gloves. Goggles and face shield necessary. Wear full protective acid resistant 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. Remove sources of ignition and use non-sparking tools. Dispose with solid waste. See Waste Disposal Method. Ventilate area. Do not discharge to sewers or waterways without proper treatment.

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:

Normal for acidic materials. Always slowly add to water while stirring to avoid splattering, boiling and eruption. Never add water to acid. Store away from sources of ignition.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

CHEMICAL IDENTITY

Sulfuric acid

Fluorides, as F

*Thoracic fraction

CAS NO.

7664-93-9

N.D.

OSHA PEL

1 mg / M³

2.5 mg / M³

ACGIH TLV

0.2 mg / M³*

2.5 mg / M³

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 inorganic acid vapor respirator for mists where airborne exposure is excessive.

SKIN PROTECTION:

Butyl rubber gloves. Other equipment as required to avoid contact.

EYE PROTECTION:

Goggles and face shield 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:

Clear, amber liquid.

ODOR:

Mild.

ODOR THRESHOLD:

Not available.

pH (100%):

2.0 to 2.5

MELTING POINT/FREEZING POINT

Not available.

INITIAL BOILING POINT AND BOILING RANGE

220°F (104.4°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

1.12

SOLUBILITY IN WATER

Complete.

PARTITION COEFFICIENT: N-OCTANOL/WATER

Not available.

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AUTO-IGNITION TEMPERATURE	Not available.
VISCOSITY, DYNAMIC	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VISCOSITY	Not available.

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Hazardous reactions will not occur under normal conditions.
CHEMICAL STABILITY:	Contains an oxidizing material which may accelerate fire.
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Direct sunlight. Extremely high temperatures. Ignition sources, Incompatible materials. Heat, sparks, open flame.
INCOMPATIBLE MATERIALS:	Alkaline materials, such as metals, metal oxides, hydroxides, nitrates, amines, carbonates, etc., strong reducing agents, combustible materials.
HAZARDOUS DECOMPOSITION PRODUCTS:	Acid vapors, sulfur oxides, explosive hydrogen gas may be formed by reacting with certain metals.

SECTION 11: TOXOLOGICAL INFORMATION

ACUTE TOXICITY:	Toxic if inhaled.
LD50 AND LC50 DATA:	Not available.
ROUTES OF EXPOSURE / SYMPTOMS	
EYES:	WARNING! Causes serious eye irritation.
SKIN:	WARNING! Will cause skin irritation. Corrosive. Causes burns.
INGESTION:	WARNING! May be harmful if swallowed.
INHALATION:	May cause nasal and respiratory irritation.
GERM CELL MUTAGENICITY:	Not classified.
TERATOGENICITY:	Not available.
CHRONIC EFFECTS / CARCINOGENICITY:	IARC has classified occupational exposure to strong inorganic acid mists containing sulfuric acid as carcinogenic to humans (Group 1). This classification is for inorganic acid mists only and does not apply to sulfuric acid or sulfuric acid solutions in a physical form of strong inorganic acids other than mists. The term "mists" refers to a particulate liquid aerosol formed by condensation of a vapor or atomization of liquid. IARC's classification does not include vapors, odors, or any physical form of strong inorganic acids other than mists. Risk of cancer depends on duration and level of exposure.
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:	
Sulfuric acid	LD50 Oral: Rat 2140 mg / kg
Fluorides, as F	LC50 Inhalation Rat 510 mg / M ³ (Exposure time: 2hr) No data.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY	LC50 <i>Ceriodaphnia dubia</i> : 271.15 mg/L/48hr
PERSISTENCE AND DEGRADABILITY:	Not available.
BIOACCUMULATIVE POTENTIAL:	Bioaccumulation potential is low to none
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 acidic wastes containing fluorides. May require pH adjustment for neutralization. Dispose in accordance with local, state and federal regulations.
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SECTION 14: TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Corrosive liquid, acidic, inorganic, n.o.s. (contains sulfuric acid and fluorides)
HAZARD CLASS: 8
IDENTIFICATION NUMBER: UN3264
PACKING GROUP: II
EMERGENCY RESPONSE GUIDE: ERG #154

SECTION 15: REGULATORY INFORMATION

VOC: 0 pounds per gallon (0 grams per liter).
TSCA STATUS: All ingredients are listed on the TSCA inventory.
CERCLA REPORTABLE QUANTITY: 1,000 pounds for sulfuric acid (approximately 713 gallons).

SARA 311 / 312 HAZARD CLASSES

x	ACUTE HEALTH
	FIRE
	SUDDEN RELEASE OF PRESSURE
x	CHRONIC HEALTH
	REACTIVE

SARA 312 INFORMATION

Sulfuric acid is an extremely hazardous substances (EHS) under SARA. The threshold planning quantity is 1,000 pounds. Storage of more than 713 gallons would require filing a Tier 2 form.

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
Sulfuric acid*

CATEGORY CODE
Not applicable

CAS NUMBER
7664-93-9

% BY WEIGHT
15

*Sulfuric acid is only reportable in aerosol form.

STATE REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65

This material contains sulfuric acid, which California has identified to cause cancer.

SECTION 16: OTHER INFORMATION

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

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

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