

# 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:

## ACID CLEANER SI-W

TYPE:

Acid cleaner

PRODUCT #

115951

**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

PREPARED DATE:

05-16-18

PREPARED BY:

Steve Preece

### 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
	Specific Target Organ Toxicity	Category 2	H373
	Aquatic Toxicity (Acute)	Category 3	H402

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).
H373	May cause damage to organs (liver and kidney) through prolonged or repeated exposure.
H402	Harmful to aquatic life.

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe mist, spray, vapors.
P221	Take any precaution to avoid mixing with combustible materials.
P234	Keep only in original container.
P260	Do not breathe mist, spray, vapors.
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.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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## Precautionary Statements (cont'd)

- 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.
- P310 Immediately call a POISON CENTER or doctor / physician.
- P321 Specific treatment (see Section 4).
- P363 Wash contaminated clothing before reuse.
- P370 + P378 In case of fire: Use appropriate media to extinguish.
- 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	25 - 35
Dipropylene glycol methyl ether	DPM	34590-94-8	1 - 10

## 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, inhalation.
- 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 serious eye damage
- SKIN CONTACT:** Causes severe burns.
- INGESTION:** May be harmful if swallowed.
- INHALATION:** May cause nasal and respiratory irritation.
- CHRONIC SYMPTOMS:** 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. Chronic overexposure to dipropylene glycol methyl ether has apparently been found to cause liver abnormalities and kidney damage in laboratory animals.

### 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.

### ADVICE FOR FIRE FIGHTERS:



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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 formed by reacting with a metal.

## 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. Store away from alkalis. Keep container closed when not in use. Always add acids to water; never add water to acids.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

#### CHEMICAL IDENTITY

Sulfuric acid

#### CAS NO.

7664-93-9

#### OSHA PEL

1 mg / M<sup>3</sup>

#### ACGIH TLV

0.2 mg / M<sup>3</sup>\*

Dipropylene glycol methyl ether

34590-94-8

100 ppm (skin)

100 ppm (skin)

\*Thoracic fraction

### 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. Rubber apron and rubber boots required. 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, water-white liquid.

### ODOR:

Mild acid.

### ODOR THRESHOLD:

Not available.

### pH (100%):

2.2 - 2.5

### MELTING POINT/FREEZING POINT

Not determined

### INITIAL BOILING POINT AND BOILING RANGE

220°F (104°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

1.24

### 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

<b>REACTIVITY:</b>	Hazardous reactions will not occur under normal conditions.
<b>CHEMICAL STABILITY:</b>	Material is stable.
<b>POSSIBILITY OF HAZARDOUS REACTIONS:</b>	Hazardous polymerization will not occur.
<b>CONDITIONS TO AVOID:</b>	No data found.
<b>INCOMPATIBLE MATERIALS:</b>	Alkaline materials, such as metals, metal oxides, hydroxides, nitrates, amines, carbonates, etc., and strong reducing agents.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Acid vapors, sulfur oxides, explosive hydrogen gas formed by reacting with a metal.

## SECTION 11: TOXOLOGICAL INFORMATION

<b>ACUTE TOXICITY:</b>	Toxic if inhaled.
<b>LD50 AND LC50 DATA:</b>	Not available.
<b>ROUTES OF EXPOSURE / SYMPTOMS</b>	
<b>EYES:</b>	DANGER! Causes serious eye damage.
<b>SKIN:</b>	DANGER! Causes severe burns.
<b>INGESTION:</b>	WARNING! May be harmful if swallowed.
<b>INHALATION:</b>	WARNING! May cause nasal and respiratory irritation.
<b>GERM CELL MUTAGENICITY:</b>	Not classified.
<b>TERATOGENICITY:</b>	Not available.
<b>CHRONIC EFFECTS / CARCINOGENICITY:</b>	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. Chronic overexposure to dipropylene glycol methyl ether has apparently been found to cause liver abnormalities and kidney damage in laboratory animals.
<b>SPECIFIC TARGET ORGAN TOXICITY (Repeated exposure):</b>	May cause damage to organs (liver and kidney) through prolonged or repeated exposure.
<b>REPRODUCTIVE TOXICITY:</b>	Not classified.
<b>SPECIFIC TARGET ORGAN TOXICITY (Single exposure):</b>	Not classified.
<b>ASPIRATION HAZARD:</b>	Not classified.
<b>COMPONENT INFORMATION:</b>	
Sulfuric acid	LD50 Oral: Rat 2140 mg / kg
	LC50 Inhalation Rat 510 mg / M <sup>3</sup> (Exposure time: 2hr)
Dipropylene glycol methyl ether	LD50 Oral: No data
	LD50 Dermal rabbit: 9,510 mg/kg
	LC50 Inhalation rat: 552 ppm 7 hours

## SECTION 12: ECOLOGICAL INFORMATION

**ECOTOXICITY** LC<sub>50</sub> *Ceriodaphnia dubia*: 354 mg/L, 48 hours.

**COMPONENT INFORMATION**

Sulfuric acid	LC50 fish 1: 500 mg / L (Exposure time: 96 hr – Species: <i>Brachydanio rerio</i> [static]). LC50 fish 2: 42 mg / L (Exposure time 96 hr – Species: <i>Gambusia affinis</i> [static]).
Dipropylene glycol methyl ether	<b>Acute Toxicity:</b> LC50 fathead minnow: 10,000mg/l 96 hours LC50 <i>Daphnia magna</i> : 1,919 mg/l 48 hours EC50 <i>selenastrum capricomutum</i> : 1,000 mg/l 72 hours

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## SECTION 16: OTHER INFORMATION

**SDS STATUS:**

Revised sections 1, 12 and 16 on 05-16-18.

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

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