

310 Wayto Road | Schenectady, NY 12303 ● TEL: 800-283-3888 | FAX: 518-357-9636
EMAIL: moreinfo@sandellmfg.com | www.diedrichtechnologies.com

940 IRON & MANGANESE REMOVER

1. PRODUCT DATA

Date of Preparation: March 1, 2015

Product Name: 940 Iron & Manganese Remover

Producer: Diedrich Technologies, A Hohmann & Barnard Company, 310 Wayto Road, Schenectady, NY 12303

Company Contact: Mike Eglin

Telephone: 800-283-3888

24-Hour Emergency Contact: CHEMTREC 800-424-9300

This product is manufactured for Commercial/Industrial use. Not recommended for: Household use.

2 - HAZARDS IDENTIFICATION

GHS Ratings:

Oral Toxicity: Acute Tox. 4

Oral >300 + <=2000mg/kg

Inhalation Toxicity: Acute Tox. 2

Gases >100 + <=500ppm, Vapors >0.5+ <=2mg/l, Dusts & mists >0.05 + <=0.5mg/l

Skin corrosive: 1A

Destruction of dermal tissue: Exposure <3 min. Observation <1 hour, visible necrosis in at least one animal

Eye corrosive: 1

Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis >1.5

Carcinogen: 1B

Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity

Reproductive toxin: 2

Human or animal evidence possibly with other information

GHS Hazards

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H330 Fatal if inhaled

H350 May cause cancer

H361 Suspected of damaging fertility or the unborn child

GHS Precautions

P201 Obtain special instructions before use

P202 Do not handle until all safety precautions have been read and understood

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P271 Use only outdoors or in a well-ventilated area

P280 Wear protective gloves/protective clothing/eye protection/face protection

P281 Use personal protective equipment as required

P284 Wear respiratory protection

P310 Immediately call a POISON CENTER or doctor/physician

P320 Specific treatment is urgent (see section 4)

P321 Specific treatment (see section 4)

P330 Rinse mouth

P363 Wash contaminated clothing before reuse

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P304+P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P305+P351+P338

IF IN EYES: Rinse continuously 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

P405 Store locked up

P403+P233

Store in a well ventilated place. Keep container tightly closed

P501 Dispose of contents/container according to local regulations

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Danger



3. COMPOSITION

Chemical Name/ CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Phosphoric acid 7664-38-2 13 percent	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL
Sulfuric acid 7664-93-9 10 percent	1 mg/m3 TWA	0.2 mg/m3 TWA (thoracic fraction)	NIOSH: 1 mg/m3 TWA
Ammonium bifluoride 1341-49-7 6 percent			

4. FIRST AID MEASURES

Inhalation: Remove from further exposure. For those providing assistance, avoid exposure to yourself. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, a trained individual should attempt to resuscitate while getting immediate medical aid.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes.

Skin Contact: In case of skin contact, remove contaminated clothing. Flush the skin with large amounts of water, then wash the skin with soap and water.

Ingestion: If conscious, give 2 to 3 glasses of water. Do not induce vomiting and seek medical attention immediately.

Notes to Physician: No data found.

5. FIRE FIGHTING MEASURES

Flammable Limits: LEL: N/A UEL: N/A

Flash Point: No data available.

Extinguishing Media: Use extinguishing agent suitable for type of surrounding fire.

Unusual Fire or Explosion Hazards: No data available.

Hazardous Combustion Products: See Section 10 for a list of hazardous decomposition products for this mixture.

Fire Fighting: If evacuation of personnel is necessary, evacuate to an upwind area. Decontaminate personnel and equipment with a water wash-down after fire and smoke exposure.

Fire Fighting: Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Isolate the area and contain the spilled material. Persons not wearing the appropriate PPE should be removed from the area until the spill is cleaned up. Stop leak if you can do it without risk, stay upwind, and avoid run off to waterways and sewers.

SMALL SPILLS: Prevent entry into waterways, sewers, basements or confined areas. Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal.

LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas. Dike to collect large liquid spills, collect leaking liquid in sealable compatible containers.

ACID SPILLS: Neutralize with Soda Ash, (Sodium Carbonate) Hydrated Lime, (Calcium Hydroxide) or Baking Soda (Sodium Bicarbonate). Cautiously neutralize remainder. Then wash away with plenty of water.

7. HANDLING AND STORAGE

Handling Precautions: Wear all appropriate Personal Protective Equipment (PPE). Wear respiratory protection or ensure adequate ventilation at all times as vapors can accumulate in confined or poorly ventilated areas. Use the product in a manner which minimizes splashes and/or the creation of dust. Keep containment closed when not in use. Do not handle or store material near heat, sparks, or open flames, or other sources of ignition.

Storage: Prevent from freezing. Store at room temperatures, i.e., 40° to 95°F (4° to 35°C)

Regulatory Requirements: No data found

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8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Chemical Name/ CAS No.	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Phosphoric acid 7664-38-2	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL
Sulfuric acid 7664-93-9	1 mg/m3 TWA	0.2 mg/m3 TWA (thoracic fraction)	NIOSH: 1 mg/m3 TWA
Ammonium bifluoride 1341-49-7			

Engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Ensure that eyewash stations and safety showers are close to the workstation location.

Ventilation Control: Provide adequate ventilation to control airborne concentration below the exposure guidelines/limits.

Administrative controls: No data found.

Personal Protection: As prescribed in the OSHA Standard for Personal Protective Equipment (29 CFR 1910.132), employers must perform a hazard Assessment of all workplaces to determine the need for proper protective equipment for each employee.

Eye Protection: Normal industrial eye protection practices should be employed.

Skin Protection: In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

Respiratory: If airborne concentration limits are not met, an approved respirator must be worn.

Contaminated Equipment: Dispose of the waste in compliance with federal, state, regional, and local regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Partition coefficient (n-Octanol/water): Not Determined

Autoignition temperature: N/A

Decomposition temperature: Not Determined

Viscosity: Not Determined

Density: 1.177446628

Melting point: Not Determined

Freezing point: Not Determined

Solubility: Complete

Boiling range: 100°C
Flash point: 999°C, 999°F
Evaporation rate: Not Determined
Flammability: Not Determined
Appearance: Clear, Colorless
Odor: Pungent
Physical State: Liquid
Vapor Pressure: Not Determined
Odor threshold: Not Determined
Vapor Density: Not Determined
pH: Strong Acid <1
Explosive Limits: 0%

10. STABILITY AND REACTIVITY

Stability: STABLE

Incompatibilities: Avoid contact with strong bases.

Hazardous Decomposition Products: *Note:* these are all possible decomposition products based on molecular structure of components.

- Oxides of Sulfur
- Oxides of Phosphorus
- Hydrogen or Hydrogen Fluoride
- Oxides of Nitrogen or Ammonia
- Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Mixture Toxicity

Oral Toxicity: 1,679.00mg/kg

Inhalation Toxicity: 0.27mg/L

Component Toxicity

7664-38-2 Phosphoric acid

Oral: 1,530.00 mg/kg (Rat)

Dermal: 2,730.00 mg/kg (Rabbit)

Routes of entry: No data found.

Target Organs: Eyes, Skin, Respiratory System

Effects of Overexposure: Causes severe skin burns and eye damage

CAS Number	Description	% Weight	Carcinogen Rating
7664-93-9	Sulfuric acid	10	Sulfuric acid: IARC: Human carcinogen IARC: Human carcinogen OSHA: listed

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12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available for this product.
Component Ecotoxicity: Sulfuric acid 96 Hr LC50
Brachydanio rerio: > 500 mg/L [static]

13. DISPOSAL

Disposal Instructions: Refer to the latest federal, state, and local regulations regarding proper disposal.

14. TRANSPORTATION INFORMATION

The following is for US DOT Highway transportation. Other modes/jurisdictions may have different classifications.

Agency	Proper Shipping Name	UN Number	Packaging Group	Hazard Class
US DOT	Corrosive Liquid NOS. (Sulfuric Acid Phosphoric Acid)	UN1760	II	8

15 - REGULATORY INFORMATION

This listing is to highlight federal level regulation of the product. Individual states, and other nations may have further regulations not listed below.

US DOT List of Marine Pollutants (172.101 - Appendix B): None

US DOT List of Hazardous Substances and Reportable Quantities (172.101 Appendix A):
1341-49-7 Ammonium bifluoride 6%
7664-93-9 Sulfuric acid 10%
7664-38-2 Phosphoric acid 13%

US DOT List of Severe Marine Pollutants (172.101 - Appendix B): None

SARA Section 302 Extremely Hazardous Substances (40 CFR 355): 7664-93-9 Sulfuric acid 10%

Sara Section 302 Threshold Planning Quantity.
7664-93-9 Sulfuric acid 10%

SARA Section 313, Toxic Chemicals (40 CFR 372.65):
7664-93-9 Sulfuric acid 10%

EU RISK PHRASES

Toxic Substances Control Act (TSCA): All components are listed or exempt from the Toxic Substances Control Act except those listed below.
- None

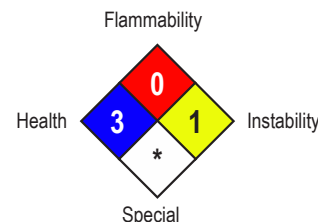
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1985 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act, and Title 40 of the Code of Federal Regulations, part 372.
7664-93-9 Sulfuric acid 10.4%

16. OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	3
Flammability	0
Physical Hazard	1
Personal Protection	D

National Fire Protection Association (NFPA)



HMIS & NFPA Hazard Rating Legend

* = CHRONIC HEALTH HAZARD
0 = INSIGNIFICANT
1 = SLIGHT
2 = MODERATE
3 = HIGH

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LEGEND

0 = LEAST 1 = SLIGHT 2 = MODERATE 3 = HIGH 4 = EXTREME

N.D. = NOT DETERMINED N.A. = NOT AVAILABLE N/A = NOT APPLICABLE

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