

150 Motor Parkway | Suite 410 | Hauppauge, NY 11788 • TEL: 800-283-3888 email: weanchor@h-b.com | www.diedrichtechnologies.com

# **ENVIRESTORE 100™**

# **1. PRODUCT DATA**

Product Name: ENVIRESTORE 100<sup>™</sup>
Producer: Diedrich Technologies,
A Hohmann & Barnard Company,
150 Motor Parkway, Suite 410, Hauppague, NY 11788
Company Contact: Jonathon Byrge
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. HAZARDOUS IDENTIFICATION

#### **GHS Ratings:**

**Oral Toxicity:** Acute Tox. 5 Anticipated oral LD50 between 2000 and 5000 mg/kg; Indication of significant effect in humans; Any mortality at class 4; Significant clinical signs at class 4

#### 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

# **Respiratory sensitizer:** 1

Respiratory sensitizer

### Carcinogen: 1B

Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity

#### **Reproductive toxin: 2**

Human or animal evidence possibly with other information

#### GHS Hazards:

- H303 May be harmful if swallowed
- H314 Causes severe skin burns and eye damage
- H318 Causes serious eye damage
- H330 Fatal if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties 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/vapours/spray
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray
- P264 Wash skin thoroughly after handling
- 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
- P285 In case of inadequate ventilation wear respiratory protection
- P310 Immediately call a POISON CENTER or doctor/ physician
- P312 Call a POISON CENTER or doctor/physician if you feel unwell
- P320 Specific treatment is urgent (see section 4I)
- **P321** Specific treatment (see section 4)
- P363 Wash contaminated clothing before reuse
- 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

#### P304+P341

IF INHALED: If breathing is difficult, 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



150 Motor Parkway | Suite 410 | Hauppauge, NY 11788 • TEL: 800-283-3888 email: weanchor@h-b.com | www.diedrichtechnologies.com

#### P308+P313

IF exposed or concerned: Get medical advice/ attention

P342+P311

- Call a POISON CENTER or doctor/physician
- P405 Store locked up

P403+P233

- Store in a well ventilated place. Keep container tightly closed
- **P501** Dispose of contents/container according to local, state and federal regulations

#### Danger



Hazards Not Otherwise Classified: N/A

### **3. COMPOSITION**

Chemical Name	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
Phosphoric acid 7664-38-2 14 percent	1 mg/m3 TWA	3 mg/m3 STEL 1 mg/m3 TWA	NIOSH: 1 mg/m3 TWA 3 mg/m3 STEL
Citric Acid 77-92-9 10 percent			
Ammonium bifluoride 1341-49-7 4 percent			
Sulfuric acid 7664-93-9 2 percent	1 mg/m3 TWA	0.2 mg/m3 TWA (thoracic fraction)	NIOSH: 1 mg/m3 TWA

# 4. FIRST AID

**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.



150 Motor Parkway | Suite 410 | Hauppauge, NY 11788 • TEL: 800-283-3888 email: weanchor@h-b.com | www.diedrichtechnologies.com

## 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

# 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
Citric Acid 77-92-9			
Ammonium bifluoride 1341-49-7			
Sulfuric acid 7664-93-9	1 mg/m3 TWA	0.2 mg/m3 TWA (thoracic fraction)	NIOSH: 1 mg/m3 TWA

**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

Melting point: Not Determined Freezing point: Not Determined Solubility: Complete Boiling range: 100°C Flash point: 999°C, 999°F Evaporation rate: Not Determined Flammable Limits: LEL: N/A UEL: N/A 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% Partition coefficient (n-Octanol/water): Not Determined Autoignition temperature: 1010°C Decomposition temperature: Not Determined Viscosity: Not Determined Density: 1.192525015 Weight Per Gallon: 8.5 lbs

### **10. STABILITY AND REACTIVITY**

Stability: STABLE Incompatabilities: 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
- Oxides of Carbon
- Hazardous polymerization will not occur



150 Motor Parkway | Suite 410 | Hauppauge, NY 11788 • TEL: 800-283-3888 email: weanchor@h-b.com | www.diedrichtechnologies.com

# 11. TOXICOLOGICAL INFORMATION

Mixture Toxicity: 2 366

Oral Toxicity: 2,366.00mg/kg Inhalation Toxicity: 0.08mg/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		IARC: Human Carcinogen OHSA: Listed	

# **12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available for this product. **Component Ecotoxicity:** 

Citric Acid: 96 Hr LC50 Lepomis macrochirus: 1516 mg/L [static] 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 (Phosphoric Acid Glycolic 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):

7664-93-9 Sulfuric acid 2 % 1341-49-7 Ammonium bifluoride 4 % 7664-38-2 Phosphoric acid 14 %

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 2 %

Sara Section 302 Threshold Planning Quantity: 7664-93-9 Sulfuric acid 2 %

SARA Section 313, Toxic Chemicals (40 CFR 372.65): 7664-93-9 Sulfuric acid 2 %

### SARA Reportable Quantity:

7664-93-9 Sulfuric acid 2 % 1341-49-7 Ammonium bifluoride 4 % 7664-38-2 Phosphoric acid 14 %

**Toxic Substances Control Act (TSCA):** All components are listed or exempt from the Toxic Substances Control Act except those listed below.

- None

2 = MODERATE 3 = HIGH

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 2.0%

# **16. OTHER INFORMATION**

Date of Preparation: July 1st, 2016 Revision Date: March 30th, 2023

Hazardous Material National Fire Protection Information System (HMIS) Association (NFPA) Flammability Health 3 Λ Flammability 0 Health Instability 1 Personal Protection D HMIS & NFPA Hazard Rating Legend Special \* = CHRONIC HEALTH HAZARD 0 = INSIGNIFICANT 1 = SLIGHT



150 Motor Parkway | Suite 410 | Hauppauge, NY 11788 • TEL: 800-283-3888 email: weanchor@h-b.com | www.diedrichtechnologies.com

# LEGEND

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

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

**DISCLAIMER:** While this company believes that the data contained herein are factual and the opinions expressed are based on tests and data believed to be reliable, it is the user's responsibility to determine the safety, toxicity and suitability for his own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by this company as to the effects of such use, the results to be obtained, or the safety and toxicity of the product, nor does this company assume any liability arising out of use, by others, of the product referred to herein. Nor is this information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or governmental regulations.

**REQUIRED SUPPLEMENTAL CONTRACT TERMS:** Failure to obtain a property owner's written acceptance of the enclosed Required Supplemental Terms and Conditions for Restoration Contract shall release any and all of the manufacturer's express or implied warranties (including, without limitation, merchantability and fitness for particular purpose) and user shall indemnify and hold manufacturer harmless from all liability cost and expenses arising in any way from use of or contact with this product. All claims of any kind against manufacturer arising from or related to this product in any way shall be decided by binding arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. **Copyright © 2016** 

Diedrich Technologies is a division of

