

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

073730793

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

073730785



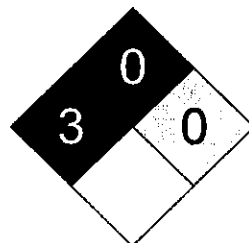
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Shine Renew Instrument Stain & Rust Remover  
**CAS #** Mixture  
**Product use** Cleaner  
**Manufacturer** Hu-Friedy Mfg. Co., LLC  
 3232 N. Rockwell  
 Chicago, IL 60618-5982 US  
 Phone: 773.975.6100  
 Fax: 773.868.3599  
 Emergency Phone: 1-800-535-5053  
 Outside US: 001-352-323-3500

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/	3
Flammability		0
		0
Personal Protection		B



## 2. Hazards Identification

**Emergency overview** DANGER -- CORROSIVE

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** Causes chemical burns. May cause blindness.

**Skin** Causes chemical burns.

**Inhalation** May cause respiratory tract irritation. Dust extremely irritating to respiratory tract.

**Ingestion** Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

**Target organs** Eyes. Skin. Mucous membranes.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** The product may cause burns to eyes, skin and mucous membranes.

**OSHA Regulatory Status** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**Potential environmental effects** See section 12.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Phosphoric acid	7664-38-2	15 - 40

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.

**Skin contact** Immediately flush with cool water for 15 minutes while removing contaminated clothing and shoes. Discard or wash well before reuse. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not flammable by WHMIS/OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of phosphorus. Hydrogen gas.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Environmental precautions</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for containment</b>	Stop leak if you can do so without risk.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

## 7. Handling and Storage

<b>Handling</b>	Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Keep container tightly closed.
<b>Storage</b>	Keep out of the reach of children. Store in a closed container away from incompatible materials.

## 8. Exposure Controls / Personal Protection

<b>Exposure limits</b>	
<b>Ingredient(s)</b>	<b>Exposure Limits</b>
Phosphoric acid	<b>ACGIH-TLV</b> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 1 mg/m <sup>3</sup>
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear chemical goggles.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code. Rubber apron recommended.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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Appearance	Clear.
Color	Violet
Form	Liquid
Odor	Mild
Odor threshold	Not available
Physical state	Liquid
pH	< 1.4
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	Not flammable
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.18
Octanol/water coefficient	Not available
Solubility (H <sub>2</sub> O)	Complete
Percent volatile	Not available

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## 10. Stability and Reactivity

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Reactivity	Reacts vigorously with alkaline material.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Bases. Oxidizers. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Oxides of phosphorus. Hydrogen gas.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Phosphoric acid	Not available

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### Component analysis - Oral LD50

Ingredient(s)	LD50
Phosphoric acid	1530 mg/kg rat

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### Effects of acute exposure

Eye	Causes chemical burns. May cause blindness.
Skin	Causes chemical burns.
Inhalation	May cause respiratory tract irritation. Dust extremely irritating to respiratory tract.
Ingestion	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.

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**Teratogenicity** Non-hazardous by WHMIS/OSHA criteria.  
**Name of Toxicologically Synergistic Products** Not available

## 12. Ecological Information

**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

**Ecotoxicity - Freshwater Fish - Acute Toxicity Data**

Phosphoric acid 7664-38-2 96 Hr LC50 *Gambusia affinis*: 3 - 3.5 mg/L

**Ecotoxicity - Water Flea - Acute Toxicity Data**

Phosphoric acid 7664-38-2 12 Hr EC50 *Daphnia magna*: 4.6 mg/L

**Persistence / degradability** Not available  
**Bioaccumulation / accumulation** Not available  
**Mobility in environmental media** Not available  
**Environmental effects** Not available  
**Aquatic toxicity** Not available  
**Partition coefficient** Not available  
**Chemical fate information** Not available  
**Other adverse effects** Not available

## 13. Disposal Considerations

**Disposal instructions** Review federal, state/provincial, and local government requirements prior to disposal.  
**Waste from residues / unused products** Not available  
**Contaminated packaging** Not available

## 14. Transport Information

**U.S. Department of Transportation (DOT)**

**Basic shipping requirements:**

**Proper shipping name** Phosphoric acid solution  
**Hazard class** 8  
**UN number** UN1805  
**Packing group** III

**Additional information:**

**Special provisions** A7, IB3, N34, T4, TP1  
**Packaging exceptions** 154  
**ERG number** 154



**Transportation of Dangerous Goods (TDG - Canada)**

**Basic shipping requirements:**

**Proper shipping name** PHOSPHORIC ACID, LIQUID  
**Hazard class** 8  
**UN number** UN1805  
**Packing group** III



## 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**Canada - WHMIS - Ingredient Disclosure List**

Phosphoric acid 7664-38-2 1 %

**WHMIS status** Controlled

**WHMIS classification** Class E - Corrosive Material

**WHMIS labeling**



**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**US Federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

Phosphoric acid 7664-38-2 5000 Lb final RQ; 2270 kg final RQ

**U.S. - CWA (Clean Water Act) - Hazardous Substances**

Phosphoric acid 7664-38-2 Present

**CERCLA (Superfund) reportable quantity**

Phosphoric acid: 5000.0000

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Hazardous substance

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Phosphoric acid 7664-38-2 Present

**U.S. - Louisiana - Reportable Quantity List for Pollutants**

Phosphoric acid 7664-38-2 5000 Lb final RQ; 2270 kg final RQ

**U.S. - Massachusetts - Right To Know List**

Phosphoric acid 7664-38-2 Present

**U.S. - Minnesota - Hazardous Substance List**

Phosphoric acid 7664-38-2 Present

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Phosphoric acid 7664-38-2 sn 1516

**U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances**

Phosphoric acid 7664-38-2 5000 Lb RQ (air); 100 lb RQ (land/water)

**U.S. - Pennsylvania - RTK (Right to Know) List**

Phosphoric acid 7664-38-2 Environmental hazard

**U.S. - Rhode Island - Hazardous Substance List**

Phosphoric acid 7664-38-2 Toxic; Flammable

**Inventory name**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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## 16. Other Information

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<b>Disclaimer</b>	Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.
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<b>Other information</b>	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.