

# Phosphoric Acid Cleaner



www.miraclesealants.com

## Deep Cleaning Action for Most Concrete/Masonry Surfaces

- Pre-Cast Concrete Paver
- Masonry
- Flamed & Honed Granite
- Flamed & Honed Limestone
- Cast Stone
- Quarry Tile
- Swimming Pool Slides
- Fountains
- Concrete
- Sanded Grout
- Cleft & Honed Slate
- Tumbled & Honed Marble
- Unglazed Ceramic Tile
- Porcelain Tile
- Tiles at Water Surface

## Special Features

- Easy-to-Use
- Interior & Exterior
- Fast Acting
- Less Expensive

## PRODUCT DESCRIPTION

**KEEP OUT OF REACH OF CHILDREN.** Phosphoric Acid Cleaner is a fast acting, easy to use acid-base cleaner for pre-cast concrete, concrete, masonry, grout, tile and natural stone surfaces. Phosphoric Acid Cleaner will remove cement grout haze and mortar residue, joint cement, lime & hard water deposits, efflorescence, rust and other dirt and grime. Phosphoric Acid Cleaner is suitable for interior and exterior use. Due to the nature of phosphoric acid, Phosphoric Acid Cleaner is a milder alternative to other acid-base cleaners for concrete, tile, grout and natural stone surfaces.

**DO NOT USE ON ACID SENSITIVE/POLISHED SURFACES.**

## Sample Testing

Due to the differences of each surface, several inconspicuous test patches should be completed to assure maximum performance. **User must determine suitability of the product for their intended use.**

## Protect Neighboring Surfaces

Always protect neighboring surfaces including wood, carpet, metal, landscaping and other incompatible surfaces.

## APPLICATION INSTRUCTIONS

**Read entire label and SDS before using.**

Thoroughly wet the surface to be cleaned with clean water. Phosphoric Acid Cleaner may be applied with a clean mop or acid resistant brush. Dilute Phosphoric Acid Cleaner 15 parts water to 1 part Phosphoric Acid Cleaner. For stronger solutions, reduce the water down to as low as 3 parts. Allow the solution to dwell on the surface for 1 - 5 minutes while agitating with a brush. Do not allow the solution to dry on the surface. Work in small areas. Extract dirty remains with a wet vacuum system. Multiple applications may be necessary. After extracting Phosphoric Acid Cleaner Solution, rinse thoroughly with clean water. Once the surface has been rinsed, rinse the surface with Tile & Stone Cleaner and clean water (20 - 1) as directed.

If a non-acid deep cleaning is necessary, use Liquid Powlite as directed.

## Special Notes:

Acid and the vapors, no matter how mild, may etch, lighten or alter the color of tile, cementitious and natural stone surfaces. Repeated acid washing may damage some surfaces.

Acid and the vapors, no matter how mild, may damage metal, carpet, leather, vinyl, wood and other surfaces. Take caution in transporting in original, upright and sealed container.

Avoid contact with all metals

Do not mix with ammoniated cleaners as harmful fumes may result.

Allow all new grout, concrete, cement or masonry to cure per manufacturer's specification before using Phosphoric Acid Cleaner.

**Light Cleaning:** Use Tile & Stone Cleaner, Porcelain & Ceramic Tile Cleaner or Limestone/Travertine Soap as directed.

## Water, Stain & Slip Protection

To protect clean surfaces from future soiling, staining and increase static coefficient of friction, we recommend applying the appropriate Miracle Penetrating Sealer/Impregnator.

## Color and Gloss Enhancement

For added color with "Textured and Non polished" surfaces, 511 Seal & Enhance or Mira Matte may be used. For porous type "Pavers", 511 Seal & Enhance may be used as directed.

## Coverage

Coverage will vary depending on density, porosity, texture, surface absorption, weather, time solution left on surface and application method. Used as directed, Phosphoric Acid Cleaner will cover approximately 500 - 2500 square feet per gallon (45 - 250 square meters per 3.785 liters).

## MAINTENANCE

For ongoing maintenance instructions please refer to Miracle Sealants Care Guide. Refer to the Miracle Sealants Product Recommendation Chart for specific product recommendations.

## Storage

Store Phosphoric Acid Cleaner in the original container, properly sealed to avoid contaminations and evaporation. Keep in the upright position. Stored at 77° F (25° C), Phosphoric Acid Cleaner will have a shelf life of 12 months. Do not allow to freeze.

## Technical Support

For additional technical support, contact Miracle Sealants Company at 1-800-350-1901 or 626-443-6433 ext. 3013

## Office Hours

Monday - Friday from 8:30 am - 5:00 pm PT.  
1-626-443-6433 or 1-800-350-1901 • Fax: 1-626-443-1435  
website: www.miraclesealants.com

## Product Damaged During Transportation

If product is damaged during transportation contact Info Trac @ 1-800-535-5053

## Additional Products

Miracle Sealants Company offers a complete line of water & stain repellents, sealers, cleaners, polishing compounds, diamond abrasives, machinery and accessories for the tile, stone, concrete, metal, fabric and carpet professional or do-it yourself specialist.

## Caution

Phosphoric Acid Cleaner contains phosphoric acid. Keep away from eyes and skin. Do not inhale or swallow. Acid resistant gloves and clothing should be worn at all times. NIOSH Respirators should worn. Use in a well ventilated area. Good ventilation means that fresh air is flowing in such a way as to feel a slight breeze. Continue to ventilate until odors are eliminated. Inhaling odors can be harmful. Keep away from heat and open flames. Avoid prolonged contact with skin. Keep small children and pets out of area until product or surfaces have dried thoroughly. **Refer to the MSDS for additional information.**

## Warranty

Instructions are a condensed guide and should not be considered complete. In the event of failure, the only obligation of Miracle Sealants Company shall be to replace such products proven to be defective. **Before using, user shall determine the suitability of the product for their intended use. User assumes all risks and liability whatsoever in connection therein.** Neither seller nor manufacturer shall be liable for any injury or inability to use this product.



# Safety Data Sheet

Issue Date: 01-Feb-2012

Revision Date: 07-Jan-2014

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** PHOSPHORIC ACID CLEANER

### Other means of identification

**SDS #** MSC-031

**UN/ID No** NA1760

### Recommended use of the chemical and restrictions on use

**Recommended Use** For deep cleaning of most concrete/masonry surfaces.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Miracle Sealants Company  
12318 Lower Azusa Road  
Arcadia, CA 91006

### Emergency Telephone Number

**Company Phone Number** 1-626-443-6433 (Phone)  
1-626-443-1435 (Fax)

**24 Hour Emergency Phone Number** For technical support call: 1-800-350-1901

**Emergency Telephone (24 hr)**  
For product spills, leaks or exposures call:  
Infotrac 1-800-535-5053 (North America) or 1-352-323-3500 (International)

## 2. HAZARDS IDENTIFICATION

**Appearance** Green liquid

**Physical State** Liquid

**Odor** acrid

### Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category C
Serious eye damage/eye irritation	Category 1

### Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

### Signal Word

**Danger**

### Hazard Statements

Toxic if inhaled  
Causes severe skin burns and eye damage

**Precautionary Statements - Prevention**

Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wash face, hands and any exposed skin thoroughly after handling  
 Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

Immediately call a poison center or doctor/physician  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 Immediately call a poison center or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a poison center or doctor/physician  
 IF SWALLOWED: rinse mouth. Do NOT induce vomiting

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
 Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other Hazards**

Toxic to aquatic life with long lasting effects

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Phosphoric acid	7664-38-2	Proprietary

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

### 4. FIRST-AID MEASURES

**First Aid Measures**

<b>General Advice</b>	Immediately call a poison center or doctor/physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
<b>Skin Contact</b>	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
<b>Ingestion</b>	IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**Most important symptoms and effects**

<b>Symptoms</b>	Causes severe skin burns and eye damage. Inhalation causes irritation and burning to nose and throat. Ingestion may cause severe burns to mouth, throat or stomach.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

Material is corrosive.

**Hazardous Combustion Products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Use personal protective equipment as required.
<b>Environmental Precautions</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Soak up with inert absorbent material. Scoop material into suitable container for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Follow all product label instructions. Use only as directed. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.
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**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Store in a well-ventilated place. Store in a cool, dry place, out of direct sunlight. Do not freeze, less than or equal to 32°F or heat above 110°F. Keep container tightly closed. Keep out of the reach of children. Keep/store only in original container. Store containers upright. Store locked up.

**Incompatible Materials** Strong oxidizers. Metals. Do not mix with ammoniated cleaners as harmful fumes may result.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Phosphoric acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Chemical anti-splash safety goggles.

**Skin and Body Protection** Chemical resistant, impermeable gloves. Wear appropriate chemical resistant clothing.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. Ventilate by opening all doors and windows. If exposure above the TLV or PEL require a NIOSH approved respirator equipped for the exposure or suitable respiratory protection per 29 CFR 1910.134 is required.

**General Hygiene Considerations** Wash contaminated clothing before reuse. Work hygienic practices: Wash hands thoroughly before handling foodstuffs, liquids or tobacco products. Use common sense and care around chemicals. Never mix this product with other chemicals. Consult your supervisor for all other hygienic and safety practices. All practices depend on your specific business. Directions for use normally found on label which will dictate engineering and control measures.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical State** Liquid

**Appearance** Green liquid

**Color** Green

**Odor** acrid

**Odor Threshold** Not determined

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	.5-2.0	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not available	
Flash Point	Not available	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	

<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Specific Gravity</b>	1.22
<b>Water Solubility</b>	Completely soluble
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Auto-ignition Temperature</b>	Not determined
<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined
<b>VOC Content (%)</b>	0% by weight

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

### Conditions to Avoid

Keep out of reach of children.

### Incompatible Materials

Strong oxidizers. Metals. Do not mix with ammoniated cleaners as harmful fumes may result.

### Hazardous Decomposition Products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

**Eye Contact**      Causes severe eye damage.

**Skin Contact**      Causes severe skin burns.

**Inhalation**      Toxic if inhaled.

**Ingestion**      May be harmful if swallowed.

### Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Phosphoric acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2730 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Alcohol Ethoxylate 68439-46-3	= 1378 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-

**Information on physical, chemical and toxicological effects**

**Symptoms** Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phosphoric acid 7664-38-2		3 - 3.5: 96 h Gambusia affinis mg/L LC50		4.6: 12 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS****Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**California Hazardous Waste Status**

Chemical Name	California Hazardous Waste Status
Phosphoric acid 7664-38-2	Corrosive

## 14. TRANSPORT INFORMATION

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

### DOT

**UN/ID No** NA1760  
**Proper Shipping Name** Compounds, cleaning liquid (Phosphoric acid)  
**Hazard Class** 8  
**Packing Group** III

### IATA

**UN/ID No** UN1760  
**Proper Shipping Name** Corrosive liquid, n.o.s. (Phosphoric acid)  
**Hazard Class** 8  
**Packing Group** III

### IMDG

**UN/ID No** UN1760  
**Proper Shipping Name** Corrosive liquid, n.o.s. (phosphoric acid)  
**Hazard Class** 8  
**Packing Group** III  
**Marine Pollutant** This material may meet the definition of a marine pollutant

## 15. REGULATORY INFORMATION

### International Inventories

**TSCA** Listed

#### **Legend:**

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*  
*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*  
*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*  
*ENCS - Japan Existing and New Chemical Substances*  
*IECSC - China Inventory of Existing Chemical Substances*  
*KECL - Korean Existing and Evaluated Chemical Substances*  
*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

### US Federal Regulations

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372



**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Phosphoric acid 7664-38-2 ( Proprietary )	5000 lb			X

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Phosphoric acid 7664-38-2	X	X	X

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	2	0	0	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	2	0	0	Not determined

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 Revision Note: New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**