

Material Safety Data Sheet



RR Rust Remover for Pavers and Slabs

1. Product and company identification

Product name	: Rust Remover for pavers and slabs
Material uses	: Use to takes out rust from pavers and slabs made of concrete.
Supplier/Manufacturer	: Techniseal 300, avenue Liberté Candiac, QC, Canada, J5R 6X1 Tel: (514) 523-2110 Toll free: 1-800-465-7325 Fax: (450) 633-3035
Validation date	: 09/30/2008
Responsible name	: Atrion Regulatory Services, Inc.
In case of emergency	: CANUTEC (613) 996-6666

2. Hazards identification

Physical state	: Liquid.
Odor	: Wintermint.
OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview	: DANGER! CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. Do not breathe vapor or mist. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Potential acute health effects	
Inhalation	: Corrosive to the respiratory system.
Ingestion	: May cause burns to mouth, throat and stomach. May be harmful if swallowed.
Skin	: Corrosive to the skin. Causes burns.
Eyes	: Corrosive to eyes. Causes burns.
Potential chronic health effects	
Chronic effects	: Contains material that may cause target organ damage, based on animal data.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.
Target organs	: Contains material which may cause damage to the following organs: upper respiratory tract, skin, eye, lens or cornea.
Over-exposure signs/symptoms	
Inhalation	: Adverse symptoms may include the following: respiratory tract irritation coughing
Ingestion	: Adverse symptoms may include the following: stomach pains

2 . Hazards identification

- Skin** : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
- Eyes** : Adverse symptoms may include the following:
 pain
 watering
 redness
- Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
- See toxicological information (section 11)

3 . Composition/information on ingredients

United States

Name	CAS number	%
Phosphoric acid	7664-38-2	10 - 30

Canada

Name	CAS number	%
Phosphoric acid	7664-38-2	10 - 30

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention immediately.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5 . Fire-fighting measures

- Flammability of the product** : Not flammable.
- Extinguishing media**
- Suitable** : Use water spray, dry chemical powder or carbon dioxide for extinction.
- Not suitable** : None known.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 phosphorus oxides

5 . Fire-fighting measures

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

Personal precautions : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7 . Handling and storage

Handling : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Storage : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8 . Exposure controls/personal protection

	United States
Product name	Exposure limits
Phosphoric acid	NIOSH REL (United States, 12/2001). STEL: 3 mg/m ³ 15 minute(s). TWA: 1 mg/m ³ 10 hour(s).
	OSHA PEL (United States, 11/2006). TWA: 1 mg/m ³ 8 hour(s).
	ACGIH TLV (United States, 1/2008). STEL: 3 mg/m ³ 15 minute(s). TWA: 1 mg/m ³ 8 hour(s).

8 . Exposure controls/personal protection

Canada

Product name

Phosphoric acid

Exposure limits

CA Alberta Provincial (Canada, 10/2006).

15 min OEL: 3 mg/m³ 15 minute(s).

8 hrs OEL: 1 mg/m³ 8 hour(s).

CA British Columbia Provincial (Canada, 7/2007).

TWA: 1 mg/m³ 8 hour(s).

STEL: 3 mg/m³ 15 minute(s).

CA Ontario Provincial (Canada, 3/2007).

TWAEV: 1 mg/m³ 8 hour(s).

STEV: 3 mg/m³ 15 minute(s).

CA Quebec Provincial (Canada, 12/2006).

TWAEV: 1 mg/m³ 8 hour(s).

STEV: 3 mg/m³ 15 minute(s).

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Eyes

: Face shield.

Skin

: Synthetic apron.

Respiratory

: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands

: Nitrile gloves.

Personal protective equipment (Pictograms)



HMIS Code/Personal protective equipment

: D

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9 . Physical and chemical properties

Physical state	: Liquid.
Color	: Blue.
Odor	: Wintermint.
pH	: 1.3
Melting/freezing point	: -11°C (12.2°F)
Specific gravity	: 1.16 g/mL
Viscosity	: Dynamic: 15.5 mPa·s (15.5 cP)
Solubility	: Miscible in water.

10 . Stability and reactivity

Stability	: The product is stable.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	: Can react with certain metals, such as aluminum, to produce flammable hydrogen gas.
Materials to avoid	: Reactive or incompatible with the following materials: oxidizing materials Strong caustics, metals, cyanides, sulphides and sulphites.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Species	Dose	Result	Exposure
Phosphoric acid	Rabbit	2740 mg/kg	LD50 Dermal	-
	Rat	1.25 g/kg	LD50 Oral	-
	Rat	1530 mg/kg	LD50 Oral	-

Inhalation	: Corrosive to the respiratory system.
Ingestion	: May cause burns to mouth, throat and stomach. May be harmful if swallowed.
Skin	: Corrosive to the skin. Causes burns.
Eyes	: Corrosive to eyes. Causes burns.

12 . Ecological information

Environmental effects	: No known significant effects or critical hazards.
------------------------------	---

13 . Disposal considerations





Waste disposal	: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
-----------------------	---

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14 . Transport information

AERG : 154

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	UN1805	PHOSPHORIC ACID IN SOLUTION	8	III		-
TDG Classification	UN1805	PHOSPHORIC ACID IN SOLUTION	8	III		-
IMDG Class	UN1805	PHOSPHORIC ACID IN SOLUTION	8	III		-
IATA-DGR Class	UN1805	PHOSPHORIC ACID IN SOLUTION	8	III		-

PG* : Packing group

15 . Regulatory information

United States

HCS Classification : Corrosive material
Target organ effects

U.S. Federal regulations : **United States inventory (TSCA 8b):** All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Phosphoric acid
SARA 311/312 MSDS distribution - chemical inventory - hazard identification
 Phosphoric acid: Immediate (acute) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Phosphoric acid
Clean Air Act (CAA) 112 accidental release prevention No products were found.
Clean Air Act (CAA) 112 regulated flammable substances No products were found.
Clean Air Act (CAA) 112 regulated toxic substances No products were found.

State regulations : **Connecticut Carcinogen Reporting:** None of the components are listed.
Connecticut Hazardous Material Survey: None of the components are listed.
Florida substances: None of the components are listed.
Illinois Chemical Safety Act: None of the components are listed.
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
Louisiana Reporting: None of the components are listed.
Louisiana Spill: None of the components are listed.
Massachusetts Spill: None of the components are listed.
Massachusetts Substances: The following components are listed: Phosphoric acid
Michigan Critical Material: None of the components are listed.
Minnesota Hazardous Substances: None of the components are listed.
New Jersey Hazardous Substances: The following components are listed: Phosphoric acid
New Jersey Spill: None of the components are listed.
New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
New York Acutely Hazardous Substances: The following components are listed:

15 . Regulatory information

Phosphoric acid

New York Toxic Chemical Release Reporting: None of the components are listed.

Pennsylvania RTK Hazardous Substances: The following components are listed:

Phosphoric acid

Rhode Island Hazardous Substances: None of the components are listed.

- California Prop. 65** : No products were found.
- Canada**
- WHMIS (Canada)** : Class E: Corrosive material



- Canadian lists** : **CEPA Toxic substances:** None of the components are listed.
Canadian ARET: None of the components are listed.
Canadian NPRI: None of the components are listed.
Alberta Designated Substances: None of the components are listed.
Ontario Designated Substances: None of the components are listed.
Quebec Designated Substances: None of the components are listed.
- Canada inventory** : All components are listed or exempted.

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.

International regulations

- International lists** : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

- Label requirements** : CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.)

Health	*	3
Fire hazard		0
Physical Hazard		0
Personal protection		D

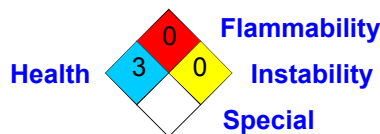
HAZARD RATINGS

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



- References** : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005.

16 . Other information

Date of issue : 09/30/2008
Version : 1

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.