

Grand River Robotics

SAFETY DATA SHEET

Section 1. Chemical Product and Company Information

Product Name : Robot Acid SDS
Other means of identification : Not applicable
Recommended Use : Pipeline cleaning product
Restrictions on Use : Reserved for industrial and professional use.

Supplier Information : Grand River Robotics
598 Glengarry Crescent
Fergus, ON
226-383-7678

Product Dilution : 0.0%-0.078%
Code :
Date of issue : 12/8/21

EMERGENCY HEALTH INFORMATION : 1 (800) 424-9300
Outside United States and Canada CALL: +1 (703) 741-5500

Section 2. Hazards Identification

GHS Classification	Category
Skin corrosion	: 1A
Serious eye damage	: 1

GHS Label Element
Hazard pictograms :



Signal Word : Danger
Hazard Statements : Causes severe skin burns and eye damage.
Precautionary Statements :

Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

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

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Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/ container to an approved waste disposal plant.

Other hazards : None Known

Section 3. Composition / Information on Ingredients

Pure substance/mixture : Mixture

Chemical Name	CAS-No.	Concentration (%)
Phosphoric Acid	7664-38-2	25 – 30
Citric Acid	77-92-9	5-10

Section 4. First Aid Measures

In case of eye contact : 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. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Treat symptomatically.

See toxicological information (Section 11)

Section 5. Fire-Fighting Measures

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

Unsuitable extinguishing media : None known.

Specific hazards during fire fighting : Not flammable or combustible.

Hazardous combustion products : Decomposition products may include the following materials:

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Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

Special protective equipment for fire-fighters : Use personal protective equipment.

Specific extinguishing methods : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Section 7. Handling and Storage

Advice on safe handling Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Conditions for safe storage Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers.

Storage temperature -30 °C to 50 °C

Section 8. Exposure Controls / Personal Protection

Ingredients	CAS-No.	Form of Exposure	Permissible Concentration	Basis
Phosphoric acid	7664-38-2	TWA	1 mg/m ³	ACGIH
		STEL	3 ppm	ACGIH
		TWA	1 mg/m ³	NIOSH REL

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Engineering measures	: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.
Personal protective equipment	
Eye protection	: Safety goggles / face protection
Hand protection	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Section 9. Physical and Chemical Properties

Appearance	: Liquid
Color	: Clear, Red
Odor	: Pungent
pH	: .07 (full strength)
Flash point	: Not applicable
Odor Threshold	: No data available
Melting point/freezing point	: No data available
Initial boiling point and boiling range	: >100°C
Evaporation Rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapor pressure	: No data available
Relative vapor density	: No data available
Relative density	: 1.172-1.175
Water solubility	: No data available
Solubility in other solvents	: No data available

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Partition coefficient: n-octanol/water	:	No data available
Autoignition temperature	:	No data available
Thermal decomposition	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Molecular weight	:	No data available
VOC	:	No data available

Section 10. Stability and Reactivity

Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid	:	None known.
Incompatible materials	:	Bases Metals
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides Nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

Section 11. Toxicological Information

Information on likely routes of exposure	:	Inhalation, Eye contact, Skin contact
Potential Health Effects	:	
Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Causes digestive tract burns.
Inhalation	:	May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.
Experience with human exposure	:	
Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough
Toxicity	:	No data available

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Acute oral toxicity	:	No data available
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
Respiratory or skin sensitization	:	No data available
Carcinogenicity	:	No data available
Reproductive effects	:	No data available
Germ cell mutagenicity	:	No data available
Teratogenicity	:	No data available
STOT-single exposure	:	No data available
STOT-repeated exposure	:	No data available
Aspiration toxicity	:	No data available

Ingredients

Acute oral toxicity	Phosphoric acid LD50 Rat: > 2,000 mg/kg
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Ingredients

Acute oral toxicity	Phosphoric acid LD50 Rabbit: > 2,000 mg/kg
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Section 12. Ecological Information

Ecotoxicity

Environmental Effects	:	This product has no known ecotoxicological effects.
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Product

Toxicity to fish	:	No data available : 96 h LC50: > 120 mg/l
Toxicity to daphnia and other aquatic invertebrates	:	No data available : 48 h EC50: > 120 mg/l
Toxicity to algae	:	No data available

Ingredients

Toxicity to fish	:	Phosphoric acid 96 h LC50: 75.1 mg/l
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Persistence and degradability	:	No data available
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Bioaccumulative potential	:	No data available
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Mobility in soil	:	No data available
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Other adverse effects	:	No data available
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Section 13. Disposal Considerations

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- Disposal methods : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
- Disposal considerations : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.
- RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste : D002 (Corrosive)

Section 14. Transport Information

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

- UN number : 3264
- Description of the goods : Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)
- Class : 8
- Packing group : II
- Environmentally hazardous : No

Sea transport (IMDG/IMO)

- UN number : 3264
- Description of the goods : Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid)
- Class : 8
- Packing group : II
- Environmentally hazardous : No

Section 15. Regulatory Information

- EPA Registration Number : None required.
- EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No	Component RQ (lbs)	Calculated product RQ (lbs)
Phosphoric Acid	7664-38-2	5,000	20,000

- SARA 311/312 Hazards : Acute Health Hazard
- SARA 302 : The following components are subject to reporting levels

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established by SARA Title III, Section 302:

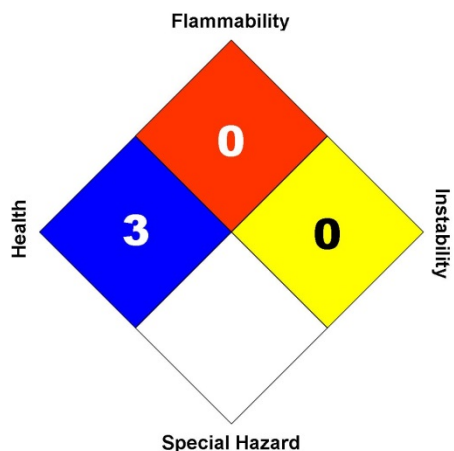
Phosphoric Acid	7664-38-2	25.0%
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California Prop 65 : This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

- United States TSCA Inventory** : On TSCA Inventory
- Canadian Domestic Substances List (DSL)** : All components of this product are on the Canadian DSL.
- Australia Inventory of Chemical Substances (AICS)** : On the inventory, or in compliance with the inventory
- New Zealand. Inventory of Chemical Substances** : On the inventory, or in compliance with the inventory
- Japan. ENCS - Existing and New Chemical Substances Inventory** : On the inventory, or in compliance with the inventory
- Japan. ENCS - Existing and New Chemical Substances Inventory** : On the inventory, or in compliance with the inventory
- Japan. ISHL - Inventory of Chemical Substances** : On the inventory, or in compliance with the inventory
- Korea. Korean Existing Chemicals Inventory (KECI)** : On the inventory, or in compliance with the inventory
- Philippines Inventory of Chemicals and Chemical Substances (PICCS)** : On the inventory, or in compliance with the inventory
- China. Inventory of Existing Chemical Substances in China (IECSC)** : On the inventory, or in compliance with the inventory

Section 16. Other Information



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = Not Significant, 1 = Slight
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

Issuing date : 2/8/21

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Version : 1
Prepared by : RJD

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material 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.