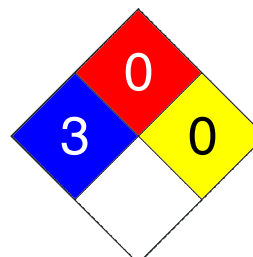


## 1. Product and Company Identification

**Product Name** Pro Still Clean Distiller Cleaner & Descaler, ECOWATER Distiller Cleaner  
**CAS #** Mixture  
**Product use** Water Processing Equipment Cleaner  
**Manufacturer** Pro Products LLC  
 7201 Engle Road  
 Fort Wayne, IN 46804-5875 US  
 Phone 260-483-2519  
 Emergency Phone: 1-800-424-9300 (CHEMTREC)

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

Health	/ 3
Flammability	0
Physical Hazard	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** May cause chemical burns. May cause blindness.  
**Skin** May cause chemical burns.  
**Inhalation** May cause respiratory tract irritation.  
**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** Not available

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Citric acid	77-92-9	30 - 60
Sulfamic acid	5329-14-6	30 - 60

## 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** Brush away excess of dry material. Immediately flush with cool water for 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing well before reuse or discard.  
**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.  
**Ingestion** Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. 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>	Carbon dioxide. Water spray. Dry chemical. Foam.
<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 carbon. Oxides of nitrogen. Oxides of sulphur.
<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>	Not available
<b>Methods for containment</b>	Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapors or divert vapor cloud drift.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Large Spills: Wet down with water and dike for later disposal. After removal flush contaminated area thoroughly with water.

## 7. Handling and Storage

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

## 8. Exposure Controls / Personal Protection

**Exposure limits**

Ingredient(s)	Exposure Limits
Citric acid	<b>ACGIH-TLV</b> TWA: 10 mg/m <sup>3</sup> <b>OSHA-PEL</b> TWA: 10 mg/m <sup>3</sup>
Sulfamic acid	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

<b>Engineering controls</b>	Use only under good ventilation conditions or with respiratory protection.
<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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<b>Appearance</b>	Crystalline.
<b>Color</b>	Blue
<b>Form</b>	Solid
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	1.2 - 1.6 (1% solution)
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Percent volatile</b>	Not available

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## 10. Stability and Reactivity

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<b>Reactivity</b>	Not available
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Caustics. Oxidizers. Reducing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulphur.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Citric acid	Not available
Sulfamic acid	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Citric acid	5040 mg/kg mouse; 3000 mg/kg rat
Sulfamic acid	1312 mg/kg mouse; 1050 mg/kg guinea pig; 3160 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	May cause chemical burns. May cause blindness.
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<b>Skin</b>	May cause chemical burns.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	Not classified or listed by IARC, NTP, OSHA and ACGIH.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Name of Toxicologically Synergistic Products</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	See below	
<b>Ecotoxicity - Freshwater Fish - Acute Toxicity Data</b>		
Citric acid	77-92-9	96 Hr LC50 <i>Lepomis macrochirus</i> : 1516 mg/L [static]
Sulfamic acid	5329-14-6	96 Hr LC50 <i>Pimephales promelas</i> : 14.2 mg/L [static]
<b>Ecotoxicity - Water Flea - Acute Toxicity Data</b>		
Citric acid	77-92-9	72 Hr EC50 <i>Daphnia magna</i> : 120 mg/L
<b>Persistence / degradability</b>	Not available	
<b>Bioaccumulation / accumulation</b>	Not available	
<b>Mobility in environmental media</b>	Not available	
<b>Environmental effects</b>	Not available	
<b>Aquatic toxicity</b>	Not available	
<b>Partition coefficient</b>	Not available	
<b>Chemical fate information</b>	Not available	
<b>Other adverse effects</b>	Not available	

## 13. Disposal Considerations

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

## 14. Transport Information

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

#### Basic shipping requirements:

<b>Proper shipping name</b>	Corrosive solids, n.o.s. (SULFAMIC ACID)
<b>Hazard class</b>	8
<b>UN number</b>	UN1759
<b>Packing group</b>	III
<b>Additional information:</b>	
<b>Special provisions</b>	128, IB8, IP3, T1, TP33
<b>Packaging exceptions</b>	154
<b>ERG number</b>	154



## Transportation of Dangerous Goods (TDG - Canada)

### Basic shipping requirements:

Proper shipping name	CORROSIVE SOLID, N.O.S. (SULFAMIC ACID)
Hazard class	8
UN number	UN1759
Packing group	III
Additional information:	
Special provisions	16



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## 15. Regulatory Information

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**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

Citric acid	77-92-9	1 %
Sulfamic acid	5329-14-6	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. All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

### CERCLA (Superfund) reportable quantity

None

### 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)** Not available

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

Sulfamic acid	5329-14-6	sn 1770
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**Inventory name**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
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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**Disclaimer**

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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**Expiry date**

31-Aug-2013

**Prepared by**

Dell Tech Laboratories Ltd. (519) 858-5021

**Other information**

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.