SAFETY DATA SHEET

1. Identification

Product identifier	**Pro Still Clean Distiller Cleaner & Descaler**
Other means of identification	Not available.
Recommended use	Water Processing Equipment Cleaner
Recommended restrictions	None known.
Manufacturer information	Pro Products LLC 6714 Pointe Inverness Way Suite 200 Fort Wayne, IN 46804-7935 US Phone: 260-483-2519 Emergency Phone: 1-800-424-9300 (CHEMTREC)
Supplier	See above.

2. Hazard identification

Physical hazards	Corrosive to metals	Category 1
Health hazards	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
Environmental hazards	Not classified.	
WHMIS 2015 defined hazards	Not classified	

Label elements

Signal word	Danger
Hazard statement	May be corrosive to metals. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Keep only in original packaging. Do not breathe dust. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.
Response	Absorb spillage to prevent material-damage. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Store in a corrosion resistant container with a resistant inner liner. Store locked up.
Disposal	Dispose of container in accordance with local, regional, national and international regulations.
WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)	None known
WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)	None known
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	Not applicable.

3. Composition/Information on ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Citric Acid		77-92-9	10-30*
Silicic acid, aluminum sodium salt		1344-00-9	0.1-1*
Sulfamic acid		5329-14-6	65-85*

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments	US GHS: The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200. *CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
Skin contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Specific treatment (see information on this label). Immediately call a POISON CENTER or doctor.
Eye contact	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.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

5. Fire-fighting measures

Suitable extinguishing media	Carbon dioxide. Water spray. Dry chemical powder. Foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Firefighters should wear a self-contained breathing apparatus.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self-contained breathing apparatus.
Fire-fighting equipment/instructions	In the event of fire, cool tanks with water spray. Cool containers with flooding quantities of water until well after fire is out.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen. Oxides of sulfur. Ammonia.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Absorb spillage to prevent material damage. Use water spray to reduce vapors or divert vapor cloud drift. Large Spills: Wet down with water and dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewers, basements or confined areas.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling	Use only with adequate ventilation. Avoid breathing dust. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use good industrial hygiene practices in handling this material. Do not get in eyes, on skin or on clothing.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in corrosive resistant container with a resistant inner liner. Store in a closed container away from incompatible materials. Keep only in the original container. Store in a cool, dry place out of direct sunlight. Keep out of the reach of children.

8. Exposure controls/Personal protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	2 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	1 mg/m3	Respirable.

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	1 mg/m3	Respirable fraction.

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	1 mg/m3	Respirable fraction.

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	2 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	1 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Silicic acid, aluminum sodium salt (CAS 1344-00-9)	TWA	2 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines This material does not have established exposure limits.

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other As required by employer code. Rubber apron recommended.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards Not applicable.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance	Free-flowing Powder.
Physical state	Solid.
Form	Solid.
Color	Yellow
Odor	Odorless
Odor threshold	Not available.
pH	0.89 (10% w/w), Acid reserve 33.56g NaOH/100g
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Pour point	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	This product may react with reducing agents. May react with strong bases or oxidizing agents.
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	Caustics. Oxidizers. Bases. Reducing agents.
Hazardous decomposition products	May include and are not limited to: Ammonia. Oxides of carbon. Oxides of nitrogen. Oxides of sulfur.

11. Toxicological information

Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Information on likely routes of exposure	
Ingestion	Causes digestive tract burns.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Citric Acid (CAS 77-92-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Not available	
Oral		
LD50	Mouse	5400 mg/kg, ECHA
	Rat	11700 mg/kg, ECHA
Silicic acid, aluminum sodium salt (CAS 1344-00-9)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
Inhalation		
LC50	Rat	> 58.8 mg/L, 4 Hours, ECHA
		> 2.1 mg/L, 4 Hours, ECHA
		> 0.7 mg/L, 4 Hours, ECHA
Oral		
LD50	Rat	> 10000 mg/kg, ECHA
		> 5000 mg/kg, ECHA
Sulfamic acid (CAS 5329-14-6)		
Acute		
Inhalation		
LC50	Not available	
Oral		
LD50	Rat	2140 mg/kg, ECHA

Skin corrosion/irritation Causes severe skin burns and eye damage.

Exposure minutes Not available.

Erythema value Not available.

Oedema value Not available.

Serious eye damage/eye irritation Causes serious eye damage.

Corneal opacity value Not available.

Iris lesion value Not available.

Conjunctival reddening value Not available.

Conjunctival oedema value Not available.

Recover days Not available.

Respiratory or skin sensitization

Canada - Alberta OELs: Irritant

Silicic acid, aluminum sodium salt (CAS 1344-00-9) Irritant

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classified or listed by IARC, NTP, OSHA and ACGIH.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Teratogenicity Non-hazardous by WHMIS/OSHA criteria.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard	Not available.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity See below

Ecotoxicological data

Components		Species	Test Results
Citric Acid (CAS 77-92-9)			
Acute			
Crustacea	EC50	Daphnia magna	120 mg/L, 72 hr
Aquatic			
Acute			
Fish	LC50	Bluegill (Lepomis macrochirus)	1516 mg/L, 96 hr
Silicic acid, aluminum sodium salt (CAS 1344-00-9)			
Crustacea	EC50	Daphnia	1400 mg/L, 48 Hours
Aquatic			
Fish	LC50	Guppy (Poecilia reticulata)	1800 - 3200 mg/L, 96 hours
Sulfamic acid (CAS 5329-14-6)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	14.2 mg/L, 96 hours

Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Mobility in general	Not available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Review federal, state/provincial, and local government requirements prior to disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

Transport of Dangerous Goods (TDG) Proof of Classification Classification Method: Classified as per Part 2, Sections 2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

U.S. Department of Transportation (DOT)

Basic shipping requirements:

UN number	UN1759
Proper shipping name	Corrosive solids, n.o.s.
Technical name	Sulfamic acid
Hazard class	8
Subsidiary hazard class	Limited Quantity - US
Packing group	III
Special provisions	128, IB8, IP3, T1, TP33
Packaging exceptions	<11 lbs - Limited Quantity
Packaging non bulk	213
Packaging bulk	240

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number	UN1759
Proper shipping name	CORROSIVE SOLID, N.O.S.
Technical name	Sulfamic acid
Hazard class	8
Subsidiary hazard class	Limited Quantity - Canada
Packing group	III
Special provisions	16
Packaging exceptions	< 5kg - Limited Quantity

DOT

TDG

15. Regulatory information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

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

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not listed.

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
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations See below

US - California Hazardous Substances (Director's): Listed substance

Silicic acid, aluminum sodium salt (CAS 1344-00-9) Listed.

US - Minnesota Haz Subs: Listed substance

Silicic acid, aluminum sodium salt (CAS 1344-00-9) Listed.

US - Texas Effects Screening Levels: Listed substance

Citric Acid (CAS 77-92-9) Listed.
Silicic acid, aluminum sodium salt (CAS 1344-00-9) Listed.
Sulfamic acid (CAS 5329-14-6) Listed.

US. New Jersey Worker and Community Right-to-Know Act

Sulfamic acid (CAS 5329-14-6)

US. Pennsylvania Worker and Community Right-to-Know Law

Silicic acid, aluminum sodium salt (CAS 1344-00-9)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

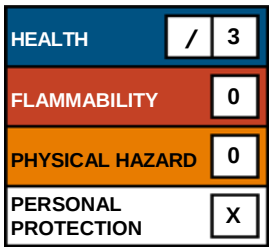
Inventory status

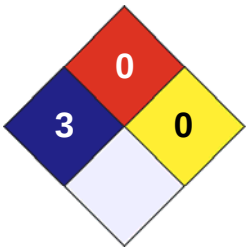
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0





Disclaimer The data contained in this material safety data sheet was obtained from sources that were technically accurate, reliable, and state of the art when this document was prepared. If data was unavailable to complete certain sections, the absence of that data is identified in this document. Because the supplier cannot know the exact circumstances during actual use of this product, other hazards, exposure scenarios, disposal considerations, and regulations may apply and it is the responsibility of the user to read and understand the product label and this document before use. Do not use the product for purposes other than those stated in Section 1.

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

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