



# SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Product identifier</b>	<b>LanoSoft Laundry Whitener</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Rust Stain Remover
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	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)
<b>Supplier</b>	See above.

## 2. Hazards Identification

<b>Physical hazards</b>	Corrosive to metals	Category 1
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Acute toxicity, dermal	Category 4
	Skin corrosion/irritation	Category 1
	Serious eye damage/eye irritation	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>WHMIS 2015 defined hazards</b>	Not classified	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	May be corrosive to metals. Causes severe skin burns and eye damage. Harmful in contact with skin. Harmful if swallowed.
<b>Precautionary statement</b>	
<b>Prevention</b>	Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not breathe dust or mist. Wear protective gloves, protective clothing, eye protection and face protection. Keep only in original packaging.
<b>Response</b>	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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see information on this label). Absorb spillage to prevent material-damage.
<b>Storage</b>	Store in a corrosion resistant container with a resistant inner liner. Store locked up.
<b>Disposal</b>	Dispose of container in accordance with local, regional, national and international regulations.
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	Not applicable.

## 3. Composition/Information on Ingredients

Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethanedioic acid, dihydrate		6153-56-6	80-100*

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

<b>Inhalation</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor.
<b>Skin contact</b>	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse.
<b>Eye contact</b>	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.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
<b>Most important symptoms/effects, acute and delayed</b>	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.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Symptoms may be delayed.
<b>General information</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Avoid contact with eyes and skin. Wear rubber gloves and chemical splash goggles. Keep out of reach of children.

#### 5. Fire Fighting Measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self-contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	In the event of fire, cool tanks with water spray.
<b>Specific methods</b>	Cool containers exposed to flames with water until well after the fire is out.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon.

#### 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. 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.
<b>Methods and materials for containment and cleaning up</b>	Ventilate the contaminated area. Stop the flow of material, if this is without risk. Dike far ahead of spill for later disposal. Should not be released into the environment. 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.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and Storage

<b>Precautions for safe handling</b>	DANGER -- CORROSIVE Use only with adequate ventilation. Wear appropriate personal protective equipment. Avoid prolonged exposure. When using, do not eat, drink or smoke. Avoid breathing dust. Wash thoroughly after handling. Do not taste or swallow. Avoid contact with eyes, skin and clothing. Keep container tightly closed.
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**Conditions for safe storage, including any incompatibilities**

Store locked up. Store in a corrosion resistant container with a resistant inner liner. Store in a closed container away from incompatible materials. Avoid dust formation.

## 8. Exposure Controls/Personal Protection

### Occupational exposure limits

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

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

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

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

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

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

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

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

#### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	PEL	1 mg/m3

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Ethanedioic acid, dihydrate (CAS 6153-56-6)	STEL	2 mg/m3
	TWA	1 mg/m3

### Biological limit values

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

### 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

Wear appropriate chemical resistant clothing.

<b>Respiratory protection</b>	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).
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Crystals
<b>Physical state</b>	Solid.
<b>Form</b>	Solid.
<b>Color</b>	Colorless Transparent
<b>Odor</b>	Odorless
<b>Odor threshold</b>	Not available.
<b>pH</b>	1.3 @ 0.1M Soln
<b>Melting point/freezing point</b>	214.7 °F (101.5 °C)
<b>Initial boiling point and boiling range</b>	300.2 °F (149 °C) sublimes @140-169°C
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	0.01 @ 20°C
<b>Vapor density</b>	4.4
<b>Relative density</b>	1.65
<b>Solubility(ies)</b>	10g/100ml H2O @15°C
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

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## 10. Stability and Reactivity

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<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Reacts violently with strong alkaline substances. This product may react with reducing agents. Do not mix with other chemicals. Corrosive to metals.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

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## 11. Toxicological Information

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<b>Routes of exposure</b>	Inhalation. Ingestion. Skin contact. Eye contact.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Harmful if swallowed.
<b>Inhalation</b>	May cause irritation to the respiratory system.

<b>Skin contact</b>	Harmful in contact with skin. Causes severe skin burns.	
<b>Eye contact</b>	Causes serious eye damage.	
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.	
<b>Information on toxicological effects</b>		
<b>Acute toxicity</b>	Harmful by inhalation, in contact with skin and if swallowed. Causes burns.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Ethanedioic acid, dihydrate (CAS 6153-56-6)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	20000 mg/kg, European Agency for the Evaluation of Medicinal Products
<i>Inhalation</i>		
LD50	Not available	
<i>Oral</i>		
LD50	Rat	375 mg/kg, Toxicology and Applied Pharmacology 9.5 ml/kg, ECHA 7.5 ml/kg, ECHA 1.1 ml/100g, ECHA
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage.	
<b>Exposure minutes</b>	Not available.	
<b>Erythema value</b>	Not available.	
<b>Oedema value</b>	Not available.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Corneal opacity value</b>	Not available.	
<b>Iris lesion value</b>	Not available.	
<b>Conjunctival reddening value</b>	Not available.	
<b>Conjunctival oedema value</b>	Not available.	
<b>Recover days</b>	Not available.	
<b>Respiratory or skin sensitization</b>		
<b>Canada - Alberta OELs: Irritant</b>		
Ethanedioic acid, dihydrate (CAS 6153-56-6)		Irritant
<b>Respiratory sensitization</b>	Not available.	
<b>Skin sensitization</b>	Not available.	
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not available.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

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## 12. Ecological Information

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<b>Ecotoxicity</b>	See below
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**Ecotoxicological data**

Components	Species	Test Results
Ethanedioic acid, dihydrate (CAS 6153-56-6)		
Crustacea	EC50	Daphnia
		137.5 mg/L, 48 Hours
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
		125 - 150 mg/L, 48 hours
<b>Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>Bioaccumulative potential</b>	No data available.	
<b>Mobility in soil</b>	No data available.	
<b>Mobility in general</b>	Not available.	
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.	

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**13. Disposal Considerations**


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<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	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).
<b>Contaminated packaging</b>	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.

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**14. Transport Information**


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<b>Transport of Dangerous Goods (TDG) Proof of Classification</b>	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.
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**U.S. Department of Transportation (DOT)****Basic shipping requirements:**

<b>UN number</b>	UN3261
<b>Proper shipping name</b>	Corrosive solid, acidic, organic, n.o.s.
<b>Technical name</b>	Ethanedioic acid, dihydrate
<b>Hazard class</b>	8
<b>Subsidiary hazard class</b>	Limited Quantity - US
<b>Packing group</b>	III
<b>Special provisions</b>	IB8, IP3, T1, TP33
<b>Packaging exceptions</b>	<11lbs - Limited Quantity
<b>Packaging non bulk</b>	213
<b>Packaging bulk</b>	240

**Transportation of Dangerous Goods (TDG - Canada)****Basic shipping requirements:**

<b>UN number</b>	UN3261
<b>Proper shipping name</b>	CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
<b>Technical name</b>	Ethanedioic acid, dihydrate
<b>Hazard class</b>	8
<b>Subsidiary hazard class</b>	Limited Quantity - Canada
<b>Packing group</b>	III
<b>Special provisions</b>	16
<b>Packaging exceptions</b>	<5kg - Limited Quantity

DOT



TDG



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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 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)**

Ethanedioic acid, dihydrate (CAS 6153-56-6) 1.0 % One-Time Export Notification only.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

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**

No

**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**

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

Ethanedioic acid, dihydrate (CAS 6153-56-6) Listed.

**US - Minnesota Haz Subs: Listed substance**

Ethanedioic acid, dihydrate (CAS 6153-56-6) Listed.

**US - New Jersey RTK - Substances: Listed substance**

Ethanedioic acid, dihydrate (CAS 6153-56-6)

**US - Texas Effects Screening Levels: Listed substance**

Ethanedioic acid, dihydrate (CAS 6153-56-6) Listed.

**US. Massachusetts RTK - Substance List**

Ethanedioic acid, dihydrate (CAS 6153-56-6)

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

Not regulated.

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

Ethanedioic acid, dihydrate (CAS 6153-56-6)

**US. Rhode Island RTK**

Ethanedioic acid, dihydrate (CAS 6153-56-6)

**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**

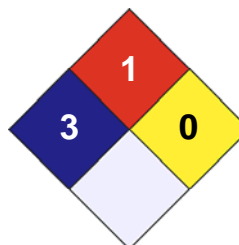
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

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

**16. Other Information**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X

**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.

**Issue date**

27-November-2018

**Version #**

02

**Effective date**

16-March-2018

**Prepared by**

Dell Tech Laboratories Ltd. Phone: (519) 858-5021

**Other information**

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

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