

# SAFETY DATA SHEET

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NGHS / English



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## 1. IDENTIFICATION

### Product identifier

**Product Name** Lemi Shine Laundry Detergent

### Other means of identification

**Product Code(s)** 1421199

### Recommended use of the chemical and restrictions on use

**Recommended Use** Laundry, Detergent

**Restrictions on use** No information available

### Details of the supplier of the safety data sheet

**Supplier Identification** Envirocon Technologies, Inc

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### Emergency telephone number

**Company Emergency Phone Number** 888.336.2582

## 2. HAZARDS IDENTIFICATION

### Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1
Reproductive toxicity	Category 2



**Appearance** Clear**Physical state** Liquid**Odor** Odorless**GHS Label elements, including precautionary statements****Danger****Hazard statements**

Causes skin irritation

Causes serious eye damage

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of damaging fertility or the unborn child

**Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wear protective gloves/protective clothing/eye protection/face protection

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

Specific treatment (see supplemental first aid instructions on this label)

**Eyes**

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

**Skin**

IF ON SKIN: Wash with plenty of water and soap

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

**Inhalation**

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

**Unknown acute toxicity** 30.98 % of the mixture consists of ingredient(s) of unknown toxicity

15.68 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

22.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
 30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Not applicable.

#### Mixture

Chemical name	CAS-No	Percent	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
.alpha.-Alkyl (C10-16) .omega.-hydroxypoly (oxyethylene) sulfate, sodium salt	68585-34-2	7.2	-	-
Dodecylbenzene sulfonic acid	27176-87-0	4.8	-	-
Sodium xylene sulfonate	1300-72-7	3.5	-	-
Propylene Glycol	57-55-6	2.5	-	-
Alcohols, C12-14, ethoxylated	68439-50-9	2.4	-	-
Sodium citrate	68-04-2	2	-	-
Subtilisin	9014-01-1	1.5	-	-
Sodium hydroxide	1310-73-2	1.28	-	-
Etidronic acid	2809-21-4	1	-	-
Pentasodium pentetate	140-01-2	0.75	-	-
Amylase, .alpha.-	9000-90-2	0.75	-	-

### 4. FIRST AID MEASURES

#### First aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. May cause allergic respiratory reaction. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Get immediate medical advice/attention.
<b>Eye contact</b>	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. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. May produce an allergic reaction. Get immediate medical advice/attention.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth

resuscitation. Use personal protective equipment as required. See section 8 for more information.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Burning sensation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** May cause sensitization in susceptible persons. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical** Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.

**Hazardous Combustion Products** Carbon oxides.

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Ensure adequate ventilation. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**Other Information** Refer to protective measures listed in Sections 7 and 8.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Provide extract ventilation to points where emissions occur. In case of insufficient ventilation, wear suitable respiratory equipment. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH	
Subtilisin 9014-01-1	Ceiling: 0.00006 mg/m <sup>3</sup> as crystalline active enzyme	(vacated) STEL: 0.00006 mg/m <sup>3</sup> 60 min	STEL: 0.00006 mg/m <sup>3</sup> 60 min Subtilisins	
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> (vacated) Ceiling: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> Ceiling: 2 mg/m <sup>3</sup>	
Chemical name	Alberta	British Columbia	Ontario TWAEV	Quebec
Propylene Glycol 57-55-6			TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>	
Subtilisin 9014-01-1	Ceiling: 0.00006 mg/m <sup>3</sup>	Ceiling: 0.00006 mg/m <sup>3</sup>	CEV: 0.00006 mg/m <sup>3</sup>	Ceiling: 0.00006 mg/m <sup>3</sup>
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	CEV: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Wear suitable protective clothing. Long sleeved clothing.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Odor</b>	Odorless
<b>Color</b>	No information available
<b>Odor Threshold</b>	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks Method</u>
<b>pH</b>	9	
<b>Melting / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash Point</b>	No data available	None known
<b>Evaporation Rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability limit</b>	No data available	
<b>Lower flammability limit</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	1.03	
<b>Water Solubility</b>	Completely soluble	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	Not Applicable	
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known

### Other Information

<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Softening Point</b>	No information available
<b>Molecular Weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Liquid Density</b>	No information available
<b>Bulk Density</b>	No information available
<b>Particle Size</b>	No information available
<b>Particle Size Distribution</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	No information available.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known based on information supplied.
<b>Incompatible materials</b>	Strong acids. Strong bases. Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. (based on components). May cause irritation of respiratory tract.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Causes serious eye damage. (based on components). Severely irritating to eyes. May cause burns. May cause irreversible damage to eyes.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause additional affects as listed under "Inhalation".

### Information on toxicological effects

<b>Symptoms</b>	Redness. Burning. May cause blindness. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. May cause redness and tearing of the eyes.
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### Numerical measures of toxicity

#### Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

<b>ATEmix (oral)</b>	6,935.00 mg/kg
<b>ATEmix (dermal)</b>	25,968.00 mg/kg

<b>Unknown acute toxicity</b>	30.98 % of the mixture consists of ingredient(s) of unknown toxicity
	15.68 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
	22.4 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
	30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
	30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
	30.98 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Dodecylbenzene sulfonic acid	= 1260 mg/kg ( Rat )	-	-
Sodium xylene sulfonate	= 1000 mg/kg ( Rat )	-	-
Propylene Glycol	= 20 g/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
Subtilisin	= 3700 mg/kg ( Rat )	-	-
Sodium hydroxide	-	= 1350 mg/kg ( Rabbit )	-
Etidronic acid	= 3130 mg/kg ( Rat )	> 10000 mg/kg ( Rabbit )	-
Amylase, .alpha.-	> 7500 mg/kg ( Rat )	-	-

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Classification based on data available for ingredients. Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

<b>Respiratory or skin sensitization</b>	May cause sensitization by inhalation.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	Classification based on data available for ingredients. Contains a known or suspected reproductive toxin.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Chemical name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Dodecylbenzene sulfonic acid	96h EC50: = 29 mg/L (Pseudokirchneriella subcapitata)	96h LC50: = 10.8 mg/L (Oncorhynchus mykiss) 96h LC50: 3.5 - 10 mg/L (Brachydanio rerio)	-	48h EC50: = 5.88 mg/L
Propylene Glycol	96h EC50: = 19000 mg/L (Pseudokirchneriella subcapitata)	96h LC50: = 51600 mg/L (Oncorhynchus mykiss) 96h LC50: 41 - 47 mL/L (Oncorhynchus mykiss) 96h LC50: = 51400 mg/L (Pimephales promelas) 96h LC50: = 710 mg/L (Pimephales promelas)	-	24h EC50: > 10000 mg/L 48h EC50: > 1000 mg/L
Sodium citrate	96h EC50: 18000 - 32000 mg/L (Chlorella vulgaris)	96h LC50: 18000 - 32000 mg/L (Poecilia reticulata)	EC50 1800 - 3200 mg/L 8 h	48h EC50: 5600 - 10000 mg/L
Sodium hydroxide	-	96h LC50: = 45.4 mg/L (Oncorhynchus mykiss)	-	-
Etidronic acid	-	96h LC50: = 868 mg/L (Lepomis macrochirus) 96h LC50: = 360 mg/L (Oncorhynchus mykiss)	-	48h EC50: = 527 mg/L
Pentasodium pentetate	72h EC50: = 2.6 mg/L (Desmodesmus subspicatus)	96h LC50: > 300 mg/L (Pimephales promelas) 96h LC50: 1005 - 1250 mg/L (Lepomis macrochirus)	EC50 = 1.09 mg/L 17 h	48h EC50: > 500 mg/L

**Persistence and Degradability** No information available.

### Bioaccumulation

Chemical name	Log Pow
Etidronic acid	3.49
Pentasodium pentetate	-3.05



**Mobility** No information available.

**Other adverse effects** No information available.

**13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

**California Hazardous Waste Codes** 561

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste
Sodium hydroxide 1310-73-2	Toxic Corrosive

**14. TRANSPORT INFORMATION**

**DOT**  
**Proper Shipping Name** NOT REGULATED  
**Hazard Class** NON-REGULATED  
 N/A

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA**  
**Proper Shipping Name** Not regulated  
**Hazard Class** NON REGULATED  
 N/A

**IMDG/IMO**  
**Hazard Class** Not regulated  
 N/A

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

**15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

**Ozone-depleting substances (ODS)** Not applicable



**Persistent Organic Pollutants** Not applicable

**Export Notification requirements** Not applicable

**International Inventories**

<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AICS</b>	Contact supplier for inventory compliance status.

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Dodecylbenzene sulfonic acid 27176-87-0	1000 lb			X
Sodium hydroxide 1310-73-2	1000 lb			X

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Dodecylbenzene sulfonic acid 27176-87-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

**US State Regulations**



**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product may contain substances regulated by state right-to-know regulations.

Chemical name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Dodecylbenzene sulfonic acid 27176-87-0	X	X	X	X	
Propylene Glycol 57-55-6	X		X		
Sodium hydroxide 1310-73-2	X	X	X	X	

## 16. OTHER INFORMATION

<b>NFPA</b>	<b>Health hazards</b> 3	<b>Flammability</b> 0	<b>Instability</b> 0	<b>Physical and Chemical Properties -</b>
<b>HMIS</b>	<b>Health hazards</b> 3*	<b>Flammability</b> 0	<b>Physical hazards</b> 0	<b>Personal Protection</b> X
<i>Chronic Hazard Star Legend</i>	<i>* = Chronic Health Hazard</i>			

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**Revision Note** No information available

**Disclaimer**

The information provided in this 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

**End of Safety Data Sheet**