

# MATERIAL SAFETY DATA SHEET

Misty Limo Sol

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Misty Limo Sol  
**Product Number:** B00625  
**Product Use:** Cleaner.  
**Manufacturer/Supplier:** Amrep, Inc.  
990 Industrial Park Drive  
Marietta, GA 30062  
**Phone Number:** (770) 422-2071 (Mon - Fri / 8am - 5pm ET)  
**D.O.T. Emergency Phone:** CHEM TEL (800) 255-3924  
INTERNATIONAL: +01-813-248-0584  
**Date of Preparation:** December 18, 2010 **Revision #:** 2.0

## Section 2: HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**HMIS:** See Section 15

WARNING

COMBUSTIBLE LIQUID. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

**Potential Health Effects:** See Section 11 for more information.

**Likely Routes of Exposure:** Skin contact, eye contact, inhalation, and ingestion.

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. May cause sensitization by skin contact.

**Ingestion:** Harmful if swallowed. Harmful: may cause lung damage if swallowed.

**Inhalation:** May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.

**Signs and Symptoms:** Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Handling can cause drying or cracking of skin. Vapours may cause drowsiness and dizziness.

**Medical Conditions Aggravated By Exposure:** Asthma. Allergies.

**Target Organs:** Skin, eyes, gastrointestinal tract, respiratory system.

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

**Potential Environmental Effects:** May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

## Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
d-Limonene	5989-27-5	30 - 60
Nonylphenol ethoxylate	9016-45-9	7 - 13
Propylene glycol mono-n-propyl ether	1569-01-3	5 - 10
Dodecylbenzenesulfonic acid	27176-87-0	1 - 5

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## Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. If easy to do, remove contact lenses, if worn.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
- Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).
- Note to Physicians:** Symptoms may not appear immediately.

## Section 5: FIRE FIGHTING MEASURES

- Flammability:** Combustible by OSHA criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, foam, carbon dioxide.
  - Unsuitable Extinguishing Media:** Water.
- Products of Combustion:** May include, and are not limited to: oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
  - Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination. Do not allow fish or other wildlife to be directly exposed to undiluted product. Dilute 1:20 or more with water before flushing to fish bearing waterways.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Scoop up material and place in a disposal container.
- Other Information:** Not available.

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## Section 7: HANDLING AND STORAGE

### Handling:

Keep away from sources of ignition. No smoking. Keep container tightly closed. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

### Storage:

Keep out of the reach of children. Keep container in a cool, well-ventilated place.

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
d-Limonene	Not available.	Not available.
Nonylphenol ethoxylate	Not available.	Not available.
Propylene glycol mono-n-propyl ether	Not available.	Not available.
Dodecylbenzenesulfonic acid	Not available.	Not available.

**Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

### Personal Protective Equipment:

**HMIS:** See Section 15

**Eye/Face Protection:** Wear eye/face protection.

**Hand Protection:** Wear suitable gloves.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear.
<b>Color:</b>	Orange.
<b>Odour:</b>	Citrus.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Liquid.
<b>pH:</b>	9.5
<b>Viscosity:</b>	Water-thin.
<b>Freezing Point:</b>	Not available.
<b>Boiling Point:</b>	> 171 °C (340 °F)
<b>Flash Point:</b>	~ 46 °C (115 °F)
<b>Evaporation Rate:</b>	< 1 (Water = 1)
<b>Lower Flammability Limit:</b>	0.7%
<b>Upper Flammability Limit:</b>	6.1%

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<b>Vapor Pressure:</b>	5 mmHg @ 100°C (212°F)
<b>Vapor Density:</b>	> 1 (Air = 1)
<b>Specific Gravity:</b>	0.895
<b>Solubility in Water:</b>	Emulsifiable.
<b>Coefficient of Water/Oil Distribution:</b>	Not available.
<b>Auto-ignition Temperature:</b>	Not available.
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	66.2% (US federal/CARB/OTC/LADCO)
<b>VOC content, g/L:</b>	Not available.

## Section 10: STABILITY AND REACTIVITY

**Stability:** Stable under normal storage conditions.

**Conditions of Reactivity:** Heat. Incompatible materials.

**Incompatible Materials:** Oxidizers. Polymerization catalysts such as aluminum chloride.

**Hazardous Decomposition Products:** May include, and are not limited to: oxides of carbon.

**Possibility of Hazardous Reactions:** No dangerous reaction known under conditions of normal use.

## Section 11: TOXICOLOGY INFORMATION

### EFFECTS OF ACUTE EXPOSURE

#### Component Analysis

<b>Ingredient</b>	<b>LD<sub>50</sub> (oral)</b>	<b>LC<sub>50</sub></b>
d-Limonene	4400 mg/kg, rat	Not available.
Nonylphenol ethoxylate	1310 mg/kg, rat	Not available.
Propylene glycol mono-n-propyl ether	2504 mg/kg, rat	Not available.
Dodecylbenzenesulfonic acid	500 mg/kg, rat	Not available.

**Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Skin:** May cause skin irritation. May cause sensitization by skin contact. Handling can cause dry skin.

**Ingestion:** Harmful if swallowed. Harmful: may cause lung damage if swallowed.

**Inhalation:** May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis. Vapours may cause drowsiness and dizziness.

### EFFECTS OF CHRONIC EXPOSURE

**Target Organs:** Not available.

**Chronic Effects:** Not hazardous by OSHA criteria.

**Carcinogenicity:** Not hazardous by OSHA criteria.

#### Ingredient

#### Chemical Listed as Carcinogen or Potential Carcinogen \*

d-Limonene	I-3
Nonylphenol ethoxylate	Not listed.
Propylene glycol mono-n-propyl ether	Not listed.
Dodecylbenzenesulfonic acid	Not listed.

\* See Section 15 for more information.

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**Mutagenicity:** Not hazardous by OSHA criteria.

**Reproductive Effects:** Not hazardous by OSHA criteria.

**Developmental Effects:**

**Teratogenicity:** Not hazardous by OSHA criteria.

**Embryotoxicity:** Not hazardous by OSHA criteria.

**Respiratory Sensitization:** Not hazardous by OSHA criteria.

**Skin Sensitization:** Hazardous by OSHA criteria.

**Toxicologically Synergistic Materials:** Not available.

## Section 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** May cause long-term adverse effects in the aquatic environment

**Persistence / Degradability:** Not available.

**Bioaccumulation / Accumulation:** Not available.

**Mobility in Environment:** Not available.

## Section 13: DISPOSAL CONSIDERATIONS

### Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Dilute 1:20 or more with water before flushing to fish bearing waterways.

## Section 14: TRANSPORTATION INFORMATION

### DOT Classification

ORM-D; Limited Quantity

## Section 15: REGULATORY INFORMATION

### Federal Regulations

**US:** MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200).

### SARA Title III

#### Ingredient

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
d-Limonene	Not listed.	Not listed.	Not listed.	Not listed.
Nonylphenol ethoxylate	Not listed.	Not listed.	Not listed.	Not listed.
Propylene glycol mono-n-propyl ether	Not listed.	Not listed.	Not listed.	Not listed.
Dodecylbenzenesulfonic acid	Not listed.	Not listed.	1,000	Not listed.

### State Regulations

#### California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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## Global Inventories

### Ingredient

d-Limonene  
Nonylphenol ethoxylate  
Propylene glycol mono-n-propyl ether  
Dodecylbenzenesulfonic acid

**USA  
TSCA**  
Yes.  
Yes.  
Yes.  
Yes.

## HMIS - Hazardous Materials Identification System

**Health - 2\*      Flammability - 2      Physical Hazard - 0      PPE – B**

## NFPA - National Fire Protection Association:

**Health - 2      Fire - 2      Reactivity - 0**

**Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

## SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

**OSHA (O)** Occupational Safety and Health Administration.

**ACGIH (G)** American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.  
A2 - Suspected human carcinogen.  
A3 - Animal carcinogen.  
A4 - Not classifiable as a human carcinogen.  
A5 - Not suspected as a human carcinogen.

**IARC (I)** International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.  
2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.  
2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.  
3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.  
4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

**NTP (N)** National Toxicology Program.

1 - Known to be carcinogens.  
2 - Reasonably anticipated to be carcinogens.

## Section 16: OTHER INFORMATION

### Disclaimer:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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