

# Lauryl Amine Oxide

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations  
Date of Issue: 12/17/2014

Version: 1.0

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

#### 1.1. Product Identifier

**Product Name:** Lauryl Amine Oxide

**CAS No:** 61788-90-7; 1643-20-5; 332-27-2

**Synonyms:** Lauryl Amine Oxide; Lauryl Myristyl Amine Oxide; LAO; Dodecyldimethylamine oxide

#### 1.2. Intended Use of the Product

**Use of the substance/mixture:** Ingredient in Personal and Home Care Products

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

Acme-Hardesty Co.  
450 Sentry Parkway  
Blue Bell, PA 19422  
T 866-226-3834 T 215-591-3610  
www.acme-hardesty.com

#### 1.4. Emergency Telephone Number

**Emergency Number** : 800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Skin Corr. 1B H314  
Eye Dam. 1 H318  
Aquatic Acute 2 H401  
Aquatic Chronic 3 H412

#### 2.2. Label Elements

##### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

: Danger

##### Hazard Statements (GHS-US)

: H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H401 - Toxic to aquatic life  
H412 - Harmful to aquatic life with long lasting effects

##### Precautionary Statements (GHS-US)

: P260 - Do not breathe mist, spray, vapors  
P264 - Wash exposed areas. thoroughly after handling  
P273 - Avoid release to the environment  
P280 - Wear eye protection, protective clothing, protective gloves  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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P310 - Immediately call a POISON CENTER or doctor/physician  
P321 - Specific treatment (see Section 4)  
P363 - Wash contaminated clothing before reuse  
P405 - Store locked up  
P501 - Dispose of contents/container to local, regional, national, and international regulations

### 2.3. Other Hazards

No additional information available

### 2.4. Unknown Acute Toxicity (GHS-US)

No data available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Water	(CAS No) 7732-18-5	86.5	Not classified
Amines, coco alkyldimethyl, N-oxides	(CAS No) 61788-90-7	4.5	Skin Corr. 1A, H314 Eye Dam. 1, H318
Lauryldimethylamine oxide	(CAS No) 1643-20-5	4.05 - 4.35	Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400
N,N-Dimethyltetradecylamine oxide	(CAS No) 3332-27-2	4.05 - 4.35	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

**First-aid Measures After Eye Contact:** 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/physician.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** Causes severe skin burns and eye damage. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Corrosive. Causes burns.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** None known.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Not flammable. Use extinguishing media appropriate for surrounding fire.

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**Unsuitable Extinguishing Media:** Do not use water jet. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Thermal decomposition generates : Corrosive vapors.

### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not allow product to spread into the environment.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Collect spillage. Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Precautions for Safe Handling:** Do not breathe mist, vapours, spray.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Wash contaminated clothing before reuse.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Reducing agents.

**Storage Area:** Store locked up.

### 7.3. Specific End Use(s) Ingredient in Personal and Home Care Products

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

### 8.2. Exposure Controls

**Appropriate Engineering Controls**

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Personal Protective Equipment**

: Gloves. Protective goggles. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing**

: Chemically resistant materials and fabrics.

**Hand Protection**

: Wear chemically resistant protective gloves.

**Eye Protection**

: Chemical goggles or face shield.

**Skin and Body Protection**

: Wear suitable protective clothing.

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**Respiratory Protection** : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**Other Information** : When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

**Physical State** : Liquid

**Appearance** : Colorless to pale yellow liquid.

**Odor** : No data available

**Odor Threshold** : No data available

**pH** : 6 - 8

**Relative Evaporation Rate (butylacetate=1)** : No data available

**Melting Point** : < 0 °C (32°F)

**Freezing Point** : No data available

**Boiling Point** : > 100 °C (212°F)

**Flash Point** : > 95 °C (203°F)

**Auto-ignition Temperature** : No data available

**Decomposition Temperature** : No data available

**Flammability (solid, gas)** : No data available

**Vapor Pressure** : No data available

**Relative Vapor Density at 20 °C** : No data available

**Relative Density** : 0.95 - 0.98 @ 25°C

**Specific Gravity** : Not available

**Solubility** : Water: Soluble

**Log Pow** : No data available

**Log Kow** : No data available

**Viscosity, Kinematic** : No data available

**Viscosity, Dynamic** : No data available

**Explosive Properties** : No data available

**Oxidizing Properties** : No data available

**Explosive Limits** : Not applicable

**9.2. Other Information** No additional information available

## SECTION 10: STABILITY AND REACTIVITY

**10.1 Reactivity:** Thermal decomposition generates : Corrosive vapors.

**10.2 Chemical Stability:** Stable at standard temperature and pressure.

**10.3 Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**10.4 Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.

**10.5 Incompatible Materials:** Reducing agents.

**10.6 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Thermal decomposition generates : Corrosive vapors.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information On Toxicological Effects

**Acute Toxicity** : Not classified

**Skin Corrosion/Irritation:** Causes severe skin burns and eye damage.

pH: 6 - 8

**Serious Eye Damage/Irritation:** Causes serious eye damage.

pH: 6 - 8

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

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**Carcinogenicity:** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Corrosive. Causes burns.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

**Chronic Symptoms:** None known.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General** : Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

Lauryldimethylamine oxide (1643-20-5)	
ErC50 (algae)	0.11 mg/l (72 hour)

### 12.2. Persistence and Degradability

Lauryl Amine Oxide (61788-90-7; 1643-20-5; 332-27-2)	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative Potential

Lauryl Amine Oxide (61788-90-7; 1643-20-5; 332-27-2)	
Bioaccumulative Potential	Not established.

**12.4. Mobility in Soil** No additional information available

### 12.5. Other Adverse Effects

**Other Information** : Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

**Ecology – Waste Materials:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

### 14.1. UN Number

**UN-No.(DOT)** : 2735

**DOT NA no.** UN2735

### 14.2. UN Proper Shipping Name

**DOT Proper Shipping Name** : Amines, liquid, corrosive, n.o.s.

**Department of Transportation (DOT)** : 8 - Class 8 - Corrosive material 49 CFR 173.136

**Hazard Classes**

**Hazard Labels (DOT)** : 8 - Corrosive



**DOT Symbols** : G - Identifies PSN requiring a technical name

**Packing Group (DOT)** : III - Minor Danger

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- DOT Special Provisions (49 CFR 172.102)** : IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).  
T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)  
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling =  $97 / (1 + a (tr - tf))$  Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.  
TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
- DOT Packaging Exceptions (49 CFR 173.xxx)** : 154
- DOT Packaging Non Bulk (49 CFR 173.xxx)** : 203
- DOT Packaging Bulk (49 CFR 173.xxx)** : 241
- 14.3. Additional Information**
- Emergency Response Guide (ERG) Number** : 153
- Other information** : No supplementary information available.

### Transport by Sea

- DOT Vessel Stowage Location** : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
- DOT Vessel Stowage Other** : 52 - Stow "separated from" acids
- Air Transport**
- DOT Quantity Limitations Passenger Aircraft/Rail (49 CFR 173.27)** : 5 L
- DOT Quantity Limitations Cargo Aircraft Only (49 CFR 175.75)** : 60 L

## SECTION 15: REGULATORY INFORMATION

### 15.1 US Federal Regulations

<b>Lauryl Amine Oxide (61788-90-7; 1643-20-5; 332-27-2)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Amines, coco alkyldimethyl, N-oxides (61788-90-7)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Lauryldimethylamine oxide (1643-20-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>N,N-Dimethyltetradecylamine oxide (3332-27-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2 US State Regulations

<b>Amines, coco alkyldimethyl, N-oxides (61788-90-7)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	
<b>Lauryldimethylamine oxide (1643-20-5)</b>	
U.S. - Texas - Effects Screening Levels - Long Term	
U.S. - Texas - Effects Screening Levels - Short Term	

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### SECTION 16: OTHER INFORMATION

#### Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

*The data herein are based on our current knowledge and believed to be reliable. Acme-Hardesty Co., provides this information without any representation or warranty, expressed or implied, regarding its accuracy or correctness.*

*Users must make their own determination that handling, storage, use and disposal of the product in the anticipated manner is safe and appropriate. Because these actions of the user are out of our control, and may be beyond our knowledge, we do not assume responsibility and expressly disclaim liability for loss, damage, expense or any other claim arising out of or in any way connected with the handling, storage, use or disposal of the product or container.*

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