novichem
Your Chemical Partner

**Material Safety Data Sheet** Revision Date: 10.12.2022

# LAURYL ALCOHOL ETHOXYLATE (3 moles)

## 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1. Identification

| | |
|---|---|
| Substance name | : Lauryl alcohol ethoxylate 3 moles |
| CAS # | : 68439-50-9 |
| Chemical family | : Nonionic Surfactants |
| Synonyms | : Dodecyl poly(oxyethylene)ether; Ethoxylated lauryl alcohol; Lauromacrogol; Lauryl alcohol ethoxylated; Lauryl poly(oxyethylene) ether |

### 1.2. Recommended use and restrictions on use

Applications of the substance/mixture

- Detergents
- Industrial & Institutional cleaning
- Industrial use
- Production of other chemicals

### 1.3. Supplier

Address : Novichem Co.
30 Magnolia Str, Qaem Maqam Farahani Ave.
Tehran 15886-13941 IRAN

### 1.4. Emergency telephone number

Emergency number : +98-21-88329799 (Product information)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification (REGULATION (EC) No 1272/2008)**

| | |
|---|---|
| Short-term (acute) aquatic hazard Category 1 | Very toxic to aquatic life. |
| Long-term (chronic) aquatic hazard Category 3 | Harmful to aquatic life with long lasting effects. |
| Eye irritation Category 2 | Causes serious eye irritation. |

### 2.2 Label elements

**Labelling (REGULATION (EC) No 1272/2008)**

**Hazard pictograms**

**Signal word** Warning

**Hazard statements**

| | |
|---|---|
| H319 | Causes serious eye irritation. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**Precautionary statements**

| | |
|---|---|
| P264 | Wash skin thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear eye protection/ face protection. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P391 | Collect spillage. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

### 2.3 Other hazards

Danger of slipping after spill or leakage.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component | Product identifier | % |
|---|---|---|
| Lauryl-Myristryl alcohol Ethoxylate | CAS-No. 68439-50-9 | 99.9 |

## 4. FIRSTAID MEASURES

### 4.1 Description of first aid measures

**General advice** — If you feel unwell, seek medical advice (show the label where possible). Take off all contaminated clothing immediately.

**If inhaled** — Remove from exposure, lie down. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, give oxygen if necessary. Consult a physician.

**In case of skin contact** — Wash off immediately with plenty of water. Consult a physician if necessary.

**In case of eye contact** — Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed** — Consult a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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

**Most important symptoms and effects, both acute and delayed** — Symptoms: No information available.

Risks: No information available.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Indication of any immediate medical attention and special treatment needed** — Treatment: No information available.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable extinguishing media** — Water spray, Dry powder, Foam, Carbon dioxide (CO2)

### 5.2 Special hazards arising from the substance or mixture

**Specific hazards during firefighting** — Dangerous gases or fumes may occur in case of fire.

### 5.3 Advice for firefighters

**Special protective equipment for firefighters** — Wear self-contained breathing apparatus for firefighting if necessary.

**Further information** — Standard procedure for chemical fires.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions** Use personal protective equipment.

### 6.2 Environmental precautions

**Environmental precautions** Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). The material taken up must be disposed of in accordance with regulations.

### 6.4 Reference to other sections

For personal protection see section 8.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**Advice on safe handling** Wear personal protective equipment.
Avoid contact with skin and eyes.

**Advice on protection against fire and explosion** Normal measures for preventive fire protection.
Do not spray on a naked flame or any incandescent material.

**Fire-fighting class** B: Fires involving liquids or liquid containing substances. Also includes substances which become liquid at elevated temperatures.

### 7.2 Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Keep tightly closed in a dry and cool place.

**Storage class (TRGS 510)** 10: Combustible liquids not in Storage Class 3

**Other data** Stable at normal ambient temperature and pressure.

### 7.3 Specific end use(s)

**Specific use(s)** This information is not available.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

**COMPONENTS WITH WORKPLACE CONTROL PARAMETERS**

**National occupational exposure limits**

No data available

**EUROPEAN OCCUPATIONAL EXPOSURE LIMITS**

No data available

**DERIVED NO EFFECT LEVEL (DNEL)**

**Substance name: Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)**

No data available

**PREDICTED NO EFFECT CONCENTRATION (PNEC)**

**Substance name: Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)**

No data available

### 8.2 Exposure controls

#### PERSONAL PROTECTIVE EQUIPMENT

| | |
|---|---|
| **Respiratory protection** | No personal respiratory protective equipment normally required. In inadequately ventilated areas, where workplace limits are exceeded, where unpleasant odours exist or where aerosols are in use, or smoke and mist occur, use self-contained breathing apparatus or breathing apparatus with a type A filter or appropriate<br><br>combined filter (e.g. where aerosols are in use, or smoke and mist occur, A-P2 or ABEK-P2), in compliance with EN 141. |
| **Hand protection** | The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature).<br><br>**gloves suitable for permanent contact:**<br>Material: butyl-rubber<br>Break through time: >= 480 min<br>Layer thickness: >= 0,7 mm<br><br>**gloves suitable for splash protection:**<br>Material: Nitrile rubber/nitrile latex<br>Break through time: >= 30 min<br>Layer thickness: >= 0,4 mm |
| **Eye protection** | Tightly fitting safety goggles, Safety glasses with side-shields |
| **Skin and body protection** | Wear suitable protective equipment. |
| **Hygiene measures** | Avoid contact with the skin and the eyes. Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feedingstuffs. When using do not eat, drink or smoke. |
| **Protective measures** | Avoid contact with the skin and the eyes. Wear suitable gloves and eye/face protection. |

#### ENVIRONMENTAL EXPOSURE CONTROLS

| | |
|---|---|
| **General advice** | Avoid subsoil penetration.<br>Do not flush into surface water or sanitary sewer system. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | liquid; 20 °C; 1.013 hPa |
| **Form** | liquid |
| **Colour** | 50 Max. pt-co |
| **Odour** | mild |
| **Odour Threshold** | No valid method available |
| **pH** | 5 - 7; 20 g/l; 20 °C |
| **HLB, calculated** | 7.9 - 8.2 |
| **Boiling point/boiling range** | Not applicable |
| **Cloud point (10% in 25% BDG)** | 60 - 63 ºC |

| | |
|---|---|
| **Evaporation rate** | No data available |
| **Flammability (solid, gas)** | not applicable (liquid) |
| **Lower explosion limit** | No data available |
| **Upper explosion limit** | No data available |
| **Average molecular weight** | 274 - 290 g/mol |
| **Hydroxyl value** | 322 - 334 mgKOH/g |
| **Density** | 0.85 - 0.95 gr/cm$^3$ |
| **Water content** | 0.1 wt% Max. |
| **Partition coefficient: n-octanol/water** | Not relevant / not applicable<br>Justification: surface-active substance |
| **Auto-ignition temperature** | not auto-flammable |
| **Viscosity, dynamic** | No data available |
| **Explosive properties** | not expected based on structure and functional groups |
| **Oxidizing properties** | not expected based on structure and functional groups |

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

**Note** Stable at normal ambient temperature and pressure.

### 10.2 Chemical stability

**Note** No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

**Hazardous reactions** None known.

### 10.4 Conditions to avoid

**Conditions to avoid** Direct heating, dirt, chemical contamination, sunlight, UV or ionising radiation.

### 10.5 Incompatible materials to avoid

**Materials to avoid** Strong acids and oxidizing agents;

### 10.6 Hazardous decomposition products

**Hazardous decomposition products** No decomposition if stored and applied as directed.

**Thermal decomposition** Hazardous decomposition products formed under fire conditions.

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity**

**Acute oral toxicity**

Alcohols, C12-14, ethoxylated (>=2.5 EO):
LD50 Rat: > 2.000 mg/kg
own test results/literature values
Category approach
Based on available data, the classification criteria are not met.

**Acute inhalation toxicity**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
No data available

**Acute dermal toxicity**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
LD50 Rabbit: > 2.000 mg/kg;
Category approach
(literature value)
Based on available data, the classification criteria are not met.

**Skin corrosion/irritation**

**Skin irritation**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
Rabbit: not irritating
own test results/literature values
Category approach
Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation**

**Eye irritation**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
Rabbit: Irritation to eyes, reversing within 7 days
Category approach
own test results/literature values
Causes serious eye irritation.

**Respiratory or skin sensitisation**

**Sensitisation**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
Maximisation Test Guinea pig: not sensitizing
Category approach
(literature value)
Based on available data, the classification criteria are not met.

**Germ cell mutagenicity**

**Genotoxicity in vitro**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
In vitro tests did not show mutagenic effects
Category approach
own test results/literature values

**Genotoxicity in vivo**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
In vivo tests did not show mutagenic effects
Category approach
(literature value)

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity**

**Toxicity to fish**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
LC50 (96 h) Brachydanio rerio (zebrafish): > 0,1 - 1 mg/l ; semi-static test
own test results/literature values
Category approach

**Toxicity to daphnia and other aquatic invertebrates**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
EC50 (48 h) Daphnia magna (Water flea): > 0,1 - 1 mg/l ; static test; own test results/literature values
Category approach

**Toxicity to aquatic plants**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
EC50 (72 h) Desmodesmus subspicatus (green algae): > 0,1 - 1 mg/l ; static test; own test results/literature values; Category approach

Alcohols, C12-14, ethoxylated (>=2.5 EO):
EC10 (72 h) Desmodesmus subspicatus (green algae): 0,1 - 1 mg/l ; static test; own test results/literature values; Category approach

**Toxicity to bacteria**
Alcohols, C12-14, ethoxylated (>=2.5 EO):
EC50 activated sludge: 140 mg/l; Respiration inhibition
Category approach
(literature value)

| | |
|---|---|
| **Toxicity to terrestrial flora** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>emergence, growth; NOEC: 10 mg/kg; Lepidium sativum (cress); OECD Test Guideline 208<br>own test results/literature values<br>Category approach |
| **Toxicity for other terrestrial non-mammalian fauna** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>No data available |

**12.2 Persistence and degradability**

| | |
|---|---|
| **Biodegradability** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>Readily biodegradable.; > 60 %; 28 d; aerobic; OECD Test Guideline 301B<br>own test results/literature values<br>Category approach |

**12.3 Bioaccumulative potential**

| | |
|---|---|
| **Bioaccumulation** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>Bioaccumulation is unlikely.<br>(literature value) |

**12.4 Mobility in soil**

| | |
|---|---|
| **Mobility** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>Moderately mobile in soils |

**12.5 Results of PBT and vPvB assessment**

| | |
|---|---|
| **Results of PBT assessment** | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| **Results of PBT assessment** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>This substance is not considered to be persistent, bioaccumulating and toxic (PBT).<br>This substance is not considered to be very persistent and very bioaccumulating (vPvB).<br>Category approach |

**12.6 Other adverse effects**

| | |
|---|---|
| **General advice** | Alcohols, C12-14, ethoxylated (>=2.5 EO):<br>Very toxic to aquatic life.<br>Harmful to aquatic life with long lasting effects. |

## 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods**

| | |
|---|---|
| **Product** | Can be incinerated, when in compliance with local regulations. |
| **waste code of the European Union: EWC** | A waste code in accordance with the European Waste Catalogue (EWC) may not be assigned to this product since it admits of a classification only when the consumer uses it for some purpose. The waste code must be determined in agreement with the regional waste disposal authority or company. |

**14.1 UN number**

| | |
|---|---|
| **ADR** | 3082 |
| **RID** | 3082 |
| **ADN** | 3082 |
| **IMDG** | 3082 |
| **ICAO/IATA** | 3082 |

## 14. TRANSPORT INFORMATION

**14.2 Proper shipping name**

| | |
|---|---|
| **ADR** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated) |
| **RID** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated) |
| **ADN** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated) |
| **IMDG** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated) |
| **ICAO/IATA** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty alcohol polyethoxylated) |

**14.3 Transport hazard class**

| | |
|---|---|
| **ADR** | 9 |
| **RID** | 9 |
| **ADN** | 9 |
| **IMDG** | 9 |
| **ICAO/IATA** | 9 |

**14.4 Packing group**

| | |
|---|---|
| **ADR** | III |
| **RID** | III |
| **ADN** | III |
| **IMDG** | III |
| **ICAO/IATA** | III |

**14.5 Environmental hazards**

| | | |
|---|---|---|
| **ADR** | Environmentally hazardous | yes |
| **RID** | Environmentally hazardous | yes |
| **ADN** | Environmentally hazardous | yes |
| **IMDG** | Marine pollutant | yes |
| **ICAO/IATA** | Environmentally hazardous | yes |

**14.6 Special precautions for user**

| | | | |
|---|---|---|---|
| **ADR** | Hazard Identification Number | | 90 |
| | Labels | | 9 |
| | Tunnel restriction code | | (-) |
| **IMDG** | Labels | 9 | |
| | EmS Number 1 | F-A | |
| | EmS Number 2 | S-F | |
| **ICAO/IATA** | Labels | | 9MI |

## 15. REGULATORY INFORMATION

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

**NOTIFICATION STATUS**

| | | |
|---|---|---|
| Switzerland. Consolidated Inventory | CH INV | listed (product or constituents are listed) |
| US. Toxic Substances Control Act | TSCA | listed (product or constituents are listed) |
| Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) | DSL | listed (product or constituents are listed) |
| Australia. Industrial Chemical (Notification and Assessment) Act | AICS | listed (product or constituents are listed) |
| Japan. Kashin-Hou Law List | ENCS (JP) | listed (product or constituents are listed) |
| Japan. Industrial Safety & Health Law (ISHL) List | ISHL (JP) | listed (product or constituents are listed) |
| Korea. Existing Chemicals Inventory (KECI) | KECI (KR) | listed (product or constituents are listed) |
| Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act | PICCS (PH) | listed (product or constituents are listed) |
| China. Inventory of Existing Chemical Substances (IECSC) | INV (CN) | listed (product or constituents are listed) |

Please note: the names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in chapter 3.

**15.2 Chemical safety assessment**

**Alcohols, C12-14 (even numbered), ethoxylated (CAS: 68439-50-9)**

A Chemical Safety Assessment is not required for this substance (exempted from obligation to register).

## 16. OTHER INFORMATION

Information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.