



## Technical Data Sheet

## ICC-Ethoxylated Products

**Trade Name:** LAE5

**Chemical Name:** LAURYL ALCOHOL ETHOXYLATE5

**Grade:** Chemical

**CAS Name:** poly (oxy-1, 2-ethanedil),  $\alpha$ -dodecyl- $\omega$ -hydroxy

Lauryl alcohol ethoxylates are non-ionic surfactants obtained by adding ethylene oxide (EO) to linear fatty alcohols having alkyl carbon atoms ranging more between 12 and 14. The Lauryl alcohols ethoxylates designated by the name "LAE" Followed by a number indicating the average number of ethylene oxide molecules added.

### Application

LAE5 is intermediates for the synthesis of sulfated products. Since they are liquid and have a low HLB value, it is recommended for use as oil solubilizer, cosmetic cream emulsifier and viscosity agent in shampoos and bath gels. It is also recommended in the formulation of textile lubricants and agrochemical suspension / emulsions.

### Storage and Handling

LAE5 should be stored in a dry covered area at a fair distance from sources of heat or ignition. Locations in which chemical products are handled must be ventilated and equipped with emergency showers besides eye washing showers.

For bulk storage, we recommend the use of stainless-steel tank or carbon steel tanks coated with vinyl ester resin, equipped with a heating coil, installed at the bottom of the tank, and a recirculation system to guarantee the homogeneity of the product.

**Shelf life:** 24 months from the date of manufacture.

TEST	STANDARD TEST METHOD	RESULT
Appearance at 25°C	—	Cloudy liquid
Color at 50°C, APHA	ASTM D-1209	10
Average molecular weight, g/mol	Calculated	405±5
pH (10%wt at isopropanol 50%v aq.)	ASTM D-1172	5-7
Cloud point, °C (10% in 25% BDG)	ASTM D-2024	70-75
Density at 25°C, g/ml	ASTM D-1298	0.96±0.02
Hydroxyl value, mg KOH/g	ASTM D-4252	130-140
HLB, calculated	Calculated	10.8
Water, percent	ASTM E-203	Max. 0.1
Refractive index at 25°C	ASTM D-1218	1.442±0.002
Polyethylene glycol, percent	ASTM D-4252	Max. 2.0
Viscosity at 25°C, cP	ASTM D-445	37±3

### Safety

Pure products can cause skin irritation; LAE5 products are only slightly toxic, and therefore safe for use in domestic cleaning products. When handling pure chemical products, we recommend the use of individual protection equipment.

**In the event of accidental contact, proceed as follows:**

**Eyes:** wash immediately with plenty of water for at least 15 minutes.

**Skin:** wash the area affected with plenty of water and remove contaminated clothing.

**Ingestion:** seek medical care urgently.