



## Technical Data Sheet

## ICC-Ethoxylated Products

**Chemical Name:** LAURYL ALCOHOL ETHOXYLATE 2

**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

LAE2 is intermediate 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

LAE2 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 heating oil, 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	—	Colorless liquid
Color at 50°C, APHA	ASTM D-1209	10
Average molecular weight, g/mol	Calculated	274-290
pH (10%wt at isopropanol 50%v aq.)	ASTM D-1172	5-7
Cloud point, °C (10% in 25% BDG)	ASTM D-2024	48-53
Density at 25°C, g/ml	ASTM D-1298	0.87±0.020
Hydroxyl value, mg KOH/g	ASTM D-4252	195-205
HLB, calculated	Calculated	6.0-6.4
Water, percent	ASTM E-203	Max. 0.1
Refractive index at 25°C	ASTM D-1218	1.43±0.002
Polyethylene glycol, percent	ASTM D-4252	Max. 1.0
Viscosity at 25°C, cP	ASTM D-445	20±2

### Safety

Pure products can cause skin irritation; LAE2 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 urgent.