



ELSURFAC – LAOx™ (Lauryl Amine Oxide)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Clear to pale yellow liquid
Physical Form	Clear to pale yellow liquid
Odor	Fatty odor / Mild amine-like
Molecular Weight	229.4 g/mol
Density	0.91 g/cm ³
Specific Gravity	0.966
Viscosity	< 100 mPa.s (@ 20°C)
Refractive Index	1.378 (@ 20°C, for 30% solution)
pH (aqueous solution)	6.0 - 8.0 (for 10% solution)
Assay / Purity	29.0 - 31.0% (as active content in solution)
Chemical Properties	
Ionic Nature	Amphoteric/Zwitterionic. Becomes cationic in acidic conditions (pH < 5) and is non-ionic in neutral or alkaline conditions.
Incompatibilities	Strong oxidizing agents, reducing agents, acids.
Hazardous Reactions	Hazardous polymerization does not occur.
Hazardous Decomposition Products	Upon heating or in a fire, can release toxic fumes including carbon oxides (CO, CO ₂) and nitrogen oxides (NO _x).
Thermal Properties	
Melting Point	24-26 °C
Boiling Point	Not applicable
Flash Point	> 100 °C (> 212 °F)
Thermal Stability	Stable under normal conditions.
Solubility	
Solubility in Water	Completely miscible / Soluble.
Solubility in Ethanol	Soluble.



2. Processing Methods

Foaming Liquid Soap

This formulation creates a rich-lathering hand soap.

Key Ingredients	Indicative Dosage (% w/w)
Water	q.s. to 100
Sodium Laureth Sulfate	10.0
Cocamidopropyl Betaine	5.0
Lauryl Amine Oxide	3.0
Glycerin	2.0
Tetrasodium EDTA	0.1
Citric Acid	to pH 5.5-6.5
Preservative	q.s.
Fragrance	q.s.

All-Purpose Household Cleaner

A general-purpose hard surface cleaner formulation.

Key Ingredients	Indicative Dosage (% w/w)
Water	q.s. to 100
Lauryl Amine Oxide	4.0
Sodium Citrate	3.0
Caprylyl/Capryl Glucoside	2.0
Ethanol	2.0
Preservative	q.s.
Fragrance	q.s.
Dye	q.s.

3. Dosing by Application

Application	Recommended / Max Dosage
Shampoos & Conditioners	1.0 - 3.0%
Body Washes & Shower Gels	2.0 - 4.0%
Facial Cleansers	0.5 - 2.0%



Application	Recommended / Max Dosage
Dishwashing Liquids	1.0 - 20.0%
Hard Surface Cleaners	1.0 - 20.0%
Bubble Baths & Hand Soaps	1.0 - 20.0%
Industrial Degreasers	1.0 - 20.0%

The information and data contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof.

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