



ELSURFAC - CAB45™ (Coco Amido Propyl Betaine)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Colorless to pale yellow liquid
Physical Form	Liquid
Odor	Faint
Molecular Weight (g/mol)	342.5
Density or Specific Gravity	1.05 - 1.07 g/cm ³ at 25°C
Viscosity	300-600 cps at (30°C)
Refractive Index	1.308 - 1.395 at 20°C
pH (if aqueous solution)	4-8 (1% aqueous solution) 25°C
Chemical Properties	
Incompatibilities	Strong acids and oxidizers
Hazardous Reactions	May cause skin irritation or allergic reactions due to impurities
Thermal Properties	
Melting Point	< -10 °C
Boiling Point	104.3°C

2. Processing Methods

Shampoo

Add CAPB slowly after SLES under gentle stirring to prevent excess foaming and ensure homogeneous blending. Use at 2-5% to enhance foam richness, viscosity, and mildness. It also helps reduce irritation from anionic surfactants.

Key Ingredients	Indicative Dosage (% w/w)
Primary surfactants (SLS, SLES, ALES, SCI etc.)	8-12%
Secondary surfactants (CAPB, CAO, CMEA, CDEA etc.)	2-5%
Thickeners	2-3%
Opacifiers/ Pearlizers	1-2%
Water	60-70%



Body Wash

Incorporate Cocamidopropyl Betaine as a secondary surfactant after dissolving the primary surfactant (e.g., SLES) in water. Use at 2-8% to improve foam creaminess, enhance viscosity, and boost mildness.

Key Ingredients	Indicative Dosage (% w/w)
Primary surfactants (SLS, SLES etc.)	10-20%
Secondary surfactants (CAPB, CAO, CDEA etc.)	2-8%
Thickening agents	0.1-3%
Fragrances and Essential oils	0.1-1%
Water	60-70%

Liquid Soap

In liquid soap production, add Cocamidopropyl Betaine after primary surfactants to boost foam and mildness. It enhances foam stability, improves skin feel, and helps thicken the formula when combined with electrolytes (e.g., NaCl).

Key Ingredients	Indicative Dosage (% w/w)
Sodium Laureth Sulfate (SLES 70%)	5%
Sodium Lauryl Sulfate (SLS 92%)	1.5%
Cocamidopropyl Betaine	5%
Cocamide DEA (CDEA)	1%
Glycerin	1%
EDTA-2Na	0.1%
Salt	2%
Deionized Water	70-80%

Cleansers

In cleanser production, add Cocamidopropyl Betaine after the surfactants to enhance foam and reduce irritation. Mix it in slowly under gentle agitation to prevent aeration and ensure a homogeneous formulation.

Key Ingredients	Indicative Dosage (% w/w)
Cocamidopropyl Betaine	5-15%
Primary surfactant	5-15%
Glycerin	1-5%
Preservative	0.5-1%
Water	50-60%

3. Dosing by Application



Products	Authorized dosage
Shampoo	5-30%
Body Wash	5-15%
Baby products	2-6%
Deodorant (underarm)	2%

4. Grade Comparison Summary

Parameter	45%
Active Matter (%)	44-46%
Appearance	Amber to yellow viscous liquid
Free Amidoamine (%)	≤0.50%
Foam Performance	Excellent
Applications	High-active bases, dilution
Compliance	TSCA, REACH

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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