



Cocamidopropyl Betaine (CAPB) is a surfactant commonly used in personal care products such as shampoos, body washes, and facial cleansers. It is derived from coconut oil and dimethylaminopropylamine, making it a "cocamide" compound. CAPB is valued in cosmetics and household products for its ability to act as a mild cleanser that creates a rich lather without stripping the skin or hair of natural oils

CHEMICAL PROPERTIES

- **Appearance:** CAPB is typically a clear to pale yellow liquid with a slightly viscous texture.
- **Solubility:** It is soluble in water, which makes it easy to formulate into various aqueous-based products.
- **pH:** CAPB solutions generally have a pH of around 5–6, which is close to the natural pH of the skin, making it gentle and less likely to cause irritation.
- **Amphoteric Nature:** CAPB is an amphoteric surfactant, meaning it can act as both an acid and a base. This property allows it to be compatible with both anionic and cationic surfactants, which makes it versatile in formulations.
- **Foaming Ability:** CAPB is known for its good foaming properties, producing a stable and dense foam even in the presence of oils or hard water.
 - **Mildness:** CAPB is considered mild and non-irritating, making it suitable for sensitive skin and baby care products