

## Technical Bulletin

MAFO CAB is a high foaming, biodegradable, amphoteric surfactant with a pleasing odor and light color. It is compatible in solutions with anionic, nonionic and cationic detergents, and, because of its outstanding properties, it is an effective performer in varied cosmetics, household products and industrial applications.

### Product Information Data:

In the Ames test, cocoamidopropyl betaine was tested in five strains of Salmonella (TA 1535, TA 1537, TA 1538, TA 98, and TA 100) both with and without metabolic activation. There were eight concentrations tested ranging from 0.001 ul/plate to 0.300 ul/plate. Both a positive and solvent controls were conducted during this study. Under the conditions of this study, the test material did not exhibit genetic activity in any of tester strains and was not mutagenic to the Salmonella indicator organism.

Both the Repeated Insult Patch Test (HRIPT) and Photoallergy study were conducted in humans (141 people for the HRIPT and 30 people for the Photoallergy study). These studies were conducted using 10% cocoamidopropyl betaine. The HRIPT was conducted to determine whether the test material in the presence of ultraviolet radiation elicits contact hypersensitivity. Both studies included a three-week induction period, a two-week rest period and a challenge phase. In addition to the test compound, the Photoallergy study also included exposure to specific doses of UVA and UVB radiation. Neither study resulted in any significant response from the test subjects. The conclusions from these studies are that cocoamidopropyl betaine does not produce either contact hypersensitivity or photoallergy in humans.

### Solubility:

MAFO CAB is soluble in water in all proportions, and together with its copious foaming properties, it exhibits excellent detergency and wetting power, even in hard water.

# MAFO<sup>®</sup> CAB COCAMIDOPROPYL AMINO BETAINE

### Specifications

Free Amine & Amine HCl Total, %.....	5 Max.
Solids, % @ 105 °C, 1.5 Hrs.....	33.0 – 37.0
Color, Gardner.....	4 Max.
Appearance @ 25 °C.....	Clear Liquid
pH, 5% Aqueous.....	5.0 – 6.5

### Typical physical properties

Form.....	Liquid
Specific Gravity @ 25°C.....	1.01
% Solids (In Water).....	35

### Applications:

MAFO CAB is substantive to skin and hair. It is also an emulsifier and coupling agent for shampoo lotions, etc. This product is excellent as an additive in shampoos to improve cleansing, hair manageability, and rinseability. It also serves as a coupling agent for quaternary germicides in anti-dandruff shampoos.

The high foaming, substantivity and emulsifying qualities of MAFO CAB will enhance specialty products, such as liquid hand cleaners, dishwashing compounds and other cleaning aids.

### Shelf Life:

BASF will endorse the results on the certificate of analysis for a period of up to one year from the date of manufacture for material in original, unopened, properly stored containers. Beyond one year, we recommend the quality of the material be confirmed prior to use, by retesting the certificate of analysis parameters.

Please refer to the Material Safety Data Sheet (MSDS) for this product for instructions on safe and proper handling and disposal.

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**Order Placement**

To place orders for delivery in the United States please call our toll free number (800) 443-6460. To place orders for delivery in Canada please call BASF Canada at (800) 267-2955.

**For Other Information**

Including product literature and Material Safety Data Sheets please call (847) 249-6750.

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