

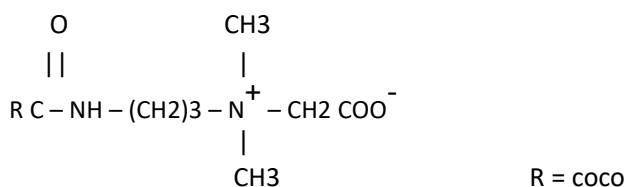
## Technical Data sheet

### 1. Identification

#### Product identifier

Other means of identification Betaine (Cocamidopropyl Betaine)

Chemical  
Structure



Chemical Description

Betaine is a mild amphoteric surfactant derived from cocomethyl esters

CAS Registry No

61789-40-0

INCI Name

Cocamidopropyl Betaine

### 2. Applications

#### Functional Properties

Primary or secondary surfactant	
Foam booster	Viscosity builder
Compatible with anionics, nonionics and cationics	Antistatic Agent

#### End Product Uses

Bubble Baths	Hand Soaps
Hair Conditioners	Cleansing Creams & Lotions
Shampoos	Shower Gels
Baby Products	Cream Rinses
Pet Shampoo	

### 3. Properties

Typical Properties	
Appearance at 25°C	Clear liquid
Solids, %	38
pH, 10% aqueous	4.5 - 7.0
Cloud Point (as is), °C (°F)	-5 (23)
Pour Point, °C (°F)	-5 (23)
Flash Point (PMCC), °C (°F)	>94 (>201)
Boiling Point, °C (°F)	>100 (>212)
Preservative	DMDM Hydantoin
Actives, %	30
Sodium Chloride, %.	5.2
Color, APHA	250 max.
Viscosity at 25°C, cps	16
Density, g/ml (lbs/U.S. gal)	1.043 (8.7)
RVOC, U.S. EPA%	0
Freeze Point, °C (°F)	-8 (18)

#### Biodegradability & Toxicity

Product is biodegradable. Additional information is available upon request.

Betaine is slightly to practically non-toxic orally (LD<sub>50</sub> = 5 g/kg) and causes moderate eye and mild skin irritation at 10% active.

#### Storage & Handling

Normal safety precautions (i.e. gloves and safety goggles) should be employed when handling Betaine. Contact with the eyes and prolonged contact with the skin should be avoided. Wash thoroughly after handling material.

It is recommended that Betaine be stored in sealed containers and kept at temperatures between 40°F (4°C) and 120°F (49°C). Avoid overheating or freezing. If material is frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use.

Standard Packaging: Betaine is available in bulk and 55 gallon drums (net weight 450 lb/204 kg).

## Formulations

### ECONOMY BUBBLE BATH (Salt-Free)

Ingredients	Wt, % (as is)	Function
Sles 30%	28.0	Primary Surfactant
Betaine	4.0	Viscosity Builder/Foam Booster
Hydroxyethylcellulose	0.4	Thickener
Citric Acid (50%)	q.s	pH Adjuster
Fragrance, Dye, Preservative	q.s	Additives
D.I. Water		
	q.s. to 100.0	Solvent, Carrier

### Mixing Procedure

Disperse Hydroxyethylcellulose in D.I. Water and heat to 42°C. Mix until completely dispersed. Add sles 30% and Betaine and blend until clear. Adjust pH to 6.5 - 7.5 with citric acid. Add fragrance dye and preservative, if desired.

### Physical Properties

Appearance at 25°C	clear liquid
pH (as is).	6.5-7.5

### HIGH ACTIVE CLEAR GEL SHAMPOO

Ingredients	Wt % (as is)	Function
Sles 30%	70.0	Primary Surfactant
Betaine	6.6	Secondary Surfactant
Citric Acid (50%)	q.s	pH Adjuster
Fragrance, Dye, Preservative	q.s	Additives
Sodium Chloride	q.s	Viscosity Adjuster
D.I. Water	q.s.to 100.0	Solvent, Carrier

### Mixing Procedure

To D.I. Water, add sles 30% and Betaine, mixing well after each addition. Adjust pH to 6.5 - 7.5 with citric acid. Add fragrance, dye and preservative, if desired. Adjust to desired viscosity with sodium chloride.

Physical Properties	
Appearance at 25°C pH (as is).	clear gel

### Additional Safety Information

A Material Safety Data Sheet is available upon request.

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