

DeTAINE PB

INCI Name: Cetyl Betaine

CAS# 693-33-4

DeTAINE PB is a versatile, readily biodegradable alkyl (C₁₆) betaine producing dense, creamy foam. It has excellent viscosity building properties in conjunction with sulfate-free surfactants as well as commonly used sulfates. Its anti-static properties lend a soft after-feel to skin and hair in Personal Care cleansing products and *it does not contain ethanol*.

DeTAINE PB is stable in acidic and alkaline formulations as well as in the presence of oxidizers such as sodium hypochlorite and hydrogen peroxide. And since alkyl betaines offer better stability at high temperatures vs. amidopropyl betaines, **DeTAINE PB** finds great utility in oilfield applications such as stabilizing CO₂/water foams at temperatures up to ~150°C in the presence of high saline brines.

DeTAINE PB is suggested for use in a wide variety of personal care, oilfield, and HI&I formulations.

SPECIFICATIONS

Appearance @ 25°C:	Clear to slightly hazy, viscous liquid
Color (Gardner):	1.0 max.
% Sodium Chloride:	4.0 max.
% Free Amine:	1.0 max.
% Solids:	22.5 +/- 2.5
pH (as-is):	5.0 – 9.0

SOLUBILITY DeTAINE PB is soluble in water, alcohols and glycols. Insoluble in most solvents.

TYPICAL PROPERTIES

Density @ 25°C ~1.0 g/ml

- Produces rich, dense foam
- Foam stabilizer & viscosity builder
- Stable in acid, alkaline, & oxidizer systems
- Detergency, wetting, & anti-static properties
- Brine/CO₂/Water foams for oilfield
- Mild, low irritation & very low color
- Compatible with all surfactant types
- Approved for use as inert in non-food use pesticide formulations

APPLICATIONS

- Alkaline or acid foaming cleaners
- Acidic or chlorinated bowl cleaners
- Vertical surface cleaners
- Car wash detergents
- Fine laundry and fabric detergents
- Shaving cream, foams & gels
- Manual hand dishwashing detergents
- Sulfate-free personal care products
- Hand cleansers, shampoo, body wash
- Viscosity & foam builder for liquid detergents & personal care products

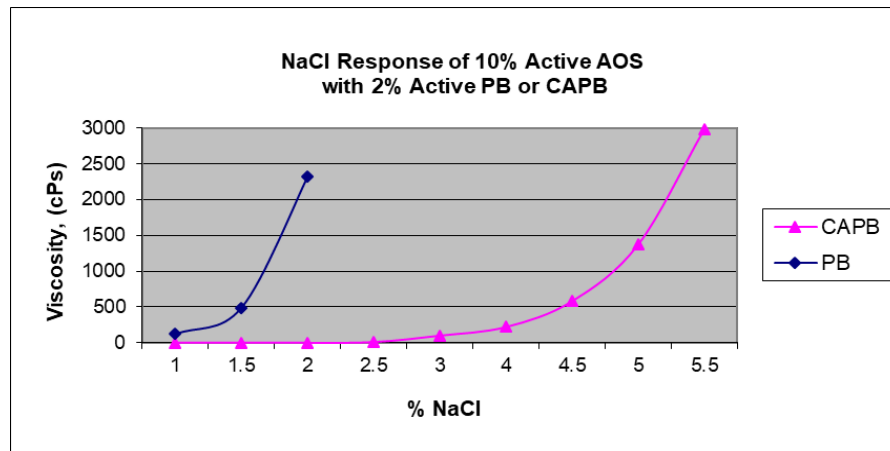
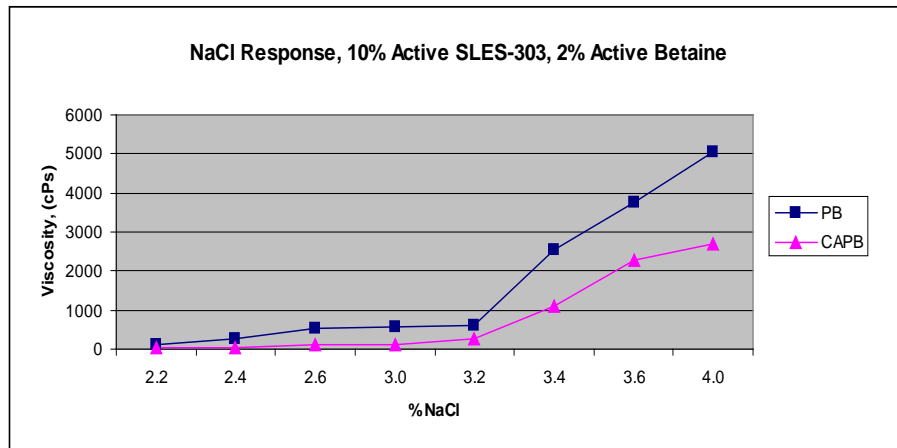
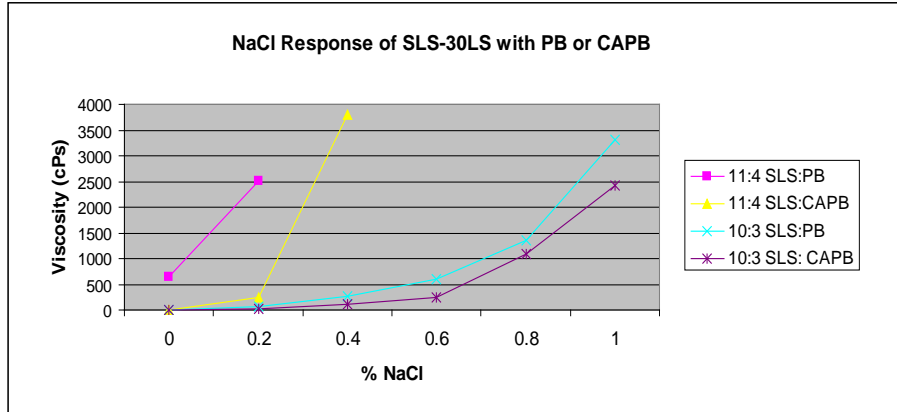
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Viscosity Building Properties

DeTAINE PB is an excellent choice to help build viscosity in sulfate, ether sulfate, and in sulfate-free surfactant systems. In many cases, higher viscosity can be achieved with **DeTAINE PB** compared to amidopropyl betaines, and generally less salt is required to achieve the same viscosity. Below are graphs comparing the viscosity of various surfactant systems. The formulations were made with DI water and are based on actives. Viscosity was measured using a Brookfield RVT Viscometer at 50 rpm, with Spindles 3 – 6 at ambient temperature.



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