

Product Technical Information Sheet

PTIS-T36304 Rev.5P
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TI-NatSurf[®] QCB

IDENTIFICATION

Description: TI-NatSurf[®] QCB is a unique synergistic mixture of plant based ingredients to create a versatile multi-functional surfactant complex.

CAS Reg. No.: Proprietary

Adopted INCI Name: **[Patent Pending]** *Aqua (Water), Cocamidopropyl hydroxysultaine, Myristamine Oxide, Caprylyl/capryl glucoside, Decyl glucoside*

TYPICAL PROPERTIES (NOT A SPECIFICATION)

Appearance at 25 °C: Clear slightly yellowish viscous liquid.

pH (10% solution): 7.0 to 8.0	Total Solids (%): 40.0
Colour (Gardner): 1	Viscosity at 25 °C (as is): 2,300 cPs
Total Active Material (%): 35.5	BCI (% renewable Carbon): 77

KEY FEATURES AND BENEFITS

- ✓ Produces rich stable “lather type” foam
- ✓ Good hydrophobe compatibility.
- ✓ Material can be formulated via cold process.
- ✓ Ability to form micro-emulsions with emollient esters.
- ✓ Fully compatible with cationic systems.
- ✓ High electrolyte tolerance.

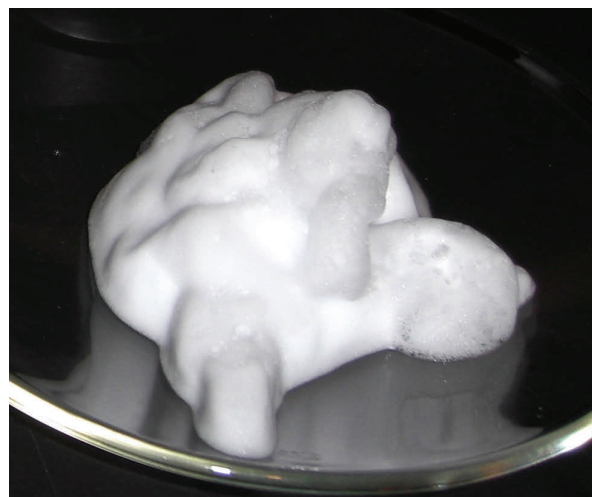
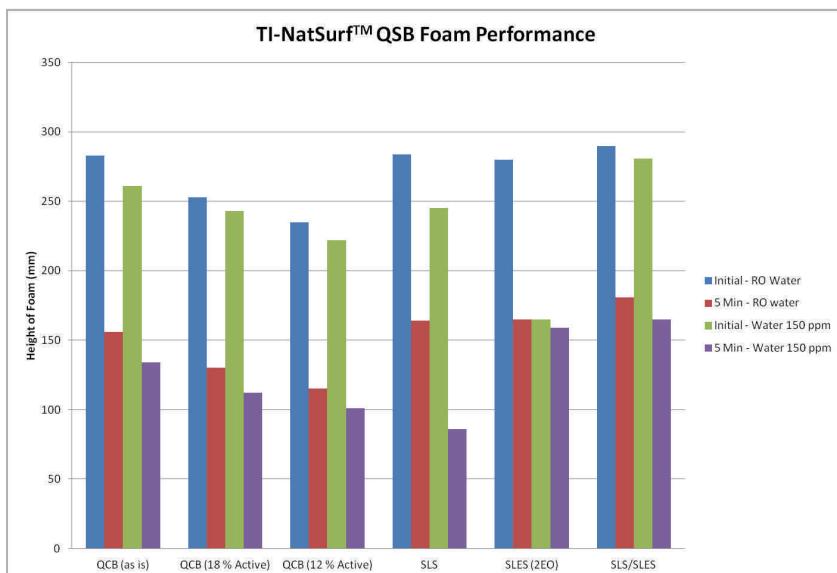
GENERAL USES AND APPLICATION AREAS

TI-NatSurf[®] QCB is a unique, naturally inspired proprietary system comprised of nonionic, and amphoteric surfactants derived from plant based renewable resources. The materials used in TI-NatSurf[®] QCB have been balanced in order to maximize each components performance characteristics, while maintaining reasonable economics. The novel use of synergistic ingredients in TI-NatSurf[®] QCB provides a unique product with superior foam performance to traditional sulphate and ether sulphate based systems. The foam generated is an extremely stable matrix of small uniform bubbles, even in the presence of emollient esters and natural oils. TI-NatSurf[®] QCB is uniquely designed to provide complete compatibility with quaternary ammonium compounds and other cationic systems.

TI-NatSurf[®] QCB can be used in aerated pump foaming systems, as well as traditional hand pumps systems for toiletry preparations. TI-NatSurf[®] QCB may be used as the primary or as the secondary surfactant in a variety of bath products, and its cationic compatibility makes it an excellent candidate for “2 in 1” shampoos. The ability to form micro-emulsions with emollient esters, allows for the formulation of translucent moisturizing cleansing systems. It also has excellent compatibility with traditional anionic systems, such as lauryl and laureth sulphates and a variety of other sulphonates, making it an ideal choice for secondary surfactant replacement.

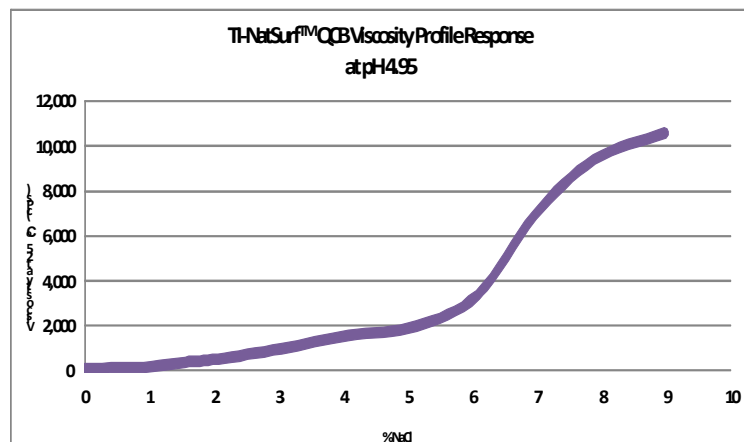
TI-NatSurf[®] QCB can be readily dispersed in cold or warm water. When formulating products for aerated pump foaming systems, the recommended use level is between 10% and 12% actives of TI-NatSurf[®] QCB, and 18 % actives or higher for body and hair products. These use levels will depend on the quality of products desired, and any other ingredients used in combination with the TI-NatSurf[®] QCB in the final preparation.

PERFORMANCE



TI-NatSurf® QCB has good foam characteristics compared to lauryl and laureth sulphates, especially in the presence of natural oils and emollient esters. Viscosity of formulations can be modified via the use of sodium chloride, in addition to a variety of nonionic thickeners, as well as synthetic polymers and natural gums.

TI-NatSurf® QCB is compatible with high levels of electrolyte, as high as 10%, and still maintain a crystal clear system, with no turbidity, or precipitation. The optimum formulating pH is 4.5 to 5.5.



STORAGE, HANDLING, & PACKAGING

It is recommended that TI-NatSurf® QCB be stored in sealed containers and kept at temperatures between 15°C and 40°C. Always avoid freezing or overheating. Should the material become frozen, mild heat and agitation are recommended to ensure the material is homogeneous before use. TI-NatSurf® QCB is stable through three(3) freeze-thaw cycles and at elevated temperature (42 °C) for six(6) weeks.

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

The TI-NatSurf QCB is a Made-To-Order product available in 20 kg pails, 200 kg drums or 1,000 kg totes.

