



FOAMERS FOR GAS LIFT

Surfactants are used in applications where high concentrations of electrolytes and multivalent cations are prevalent

BIO-BASED ENERGY SOLUTIONS THAT ARE EFFECTIVE & ENVIRONMENTALLY SENSITIVE

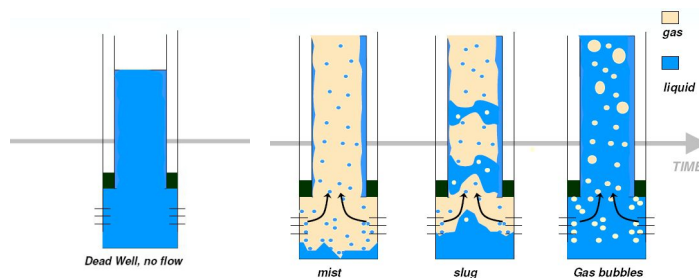
INDUSTRY APPLICATIONS

Typically used in high brine, pressure and temperature settings. SCT provides a variety of products for the following industries

- Gas well production aids to reduce hydrostatic pressure
- Air & Mist Drilling in Oilfields
- Air Entrainment in Concrete
- Density Control in Gypsum Wallboard
- Frothing Agents in Mineral Flotation

THE SCIENCE

Gas lift, also known as gas deliquification, is needed when natural gas wells are capped with water that creates hydrostatic pressure. This blockage prevents gas from reaching the surface. SCT's foamers help lessen the fluid density, allowing gas to travel through the liquid cap and increase gas production.



Learn more at www.southern-chemical.com



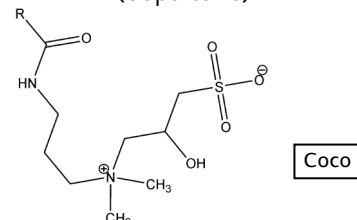
OUR PRODUCTS

SULTAINES:

SOPALTERIC CHS-50G – COCAMIDOPROPYL HYDROXYSULTAINE

Sopalteric CHS-50G is ideal for use in oil field applications where high performance and excellent foam are required. It is soluble and stable at all proportions across a broad pH range in both hard and soft water solutions. Sopalteric CHS-50G is also compatible with most other surfactants and maintains its foaming performance in high electrolyte solutions. Made from 76 degree CNO, will contain 2.7% glycerin by-product

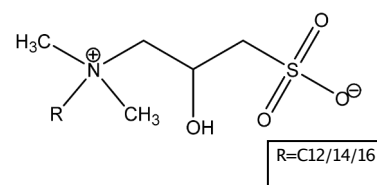
Amidopropyl HydroxySultaine
(Sopalteric)



SOPALTERIC LHS-OG – LAURYL HYDROXYSULTAINE

Sopalteric LHS-OG is ideal for use in oil field applications where high performance and excellent foam are required. It is soluble and stable at all proportions across a broad pH range in both hard and soft water solutions. More thermally stable than Cocamidopropyl Hydroxysultaine. Made from dimethylamine with a carbon distribution of C12 - 69.5%, C14 - 24.5%, C16 - 4.8%. Does not contain glycerin as a by-product

Alkyl HydroxySultaine
(Sopalteric)



BETAINES:

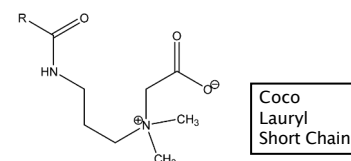
SOPALEX M35 – COCAMIDOPROPYL BETAINE

Oilfield brine foamer optimized to improve wells that are capped with “water”, creating hydrostatic pressure that does not allow the gas to reach the surface. Sopalex M35 incorporates the water into foam, lowering the density thus reducing pressure on the gas. Sopalex M35 has properties that yield the ability to foam in high brine, low to high temperature and high pressure. Made from 76 degree CNO, will contain 2.2% glycerin by-product.

SOPALEX 370-OG – COCAMIDOPROPYL BETAINE (HIGH ACTIVE)

Very similar to above, just with active level that is ~10% higher, glycerin 2.7%

Amidopropyl Betaine (Sopalex)



SOPALEX 385 – COCO BETAINE

Similar properties to above however, alkyl betaines are more thermally stable. Made from coco dimethylamine (full alkyl distribution) – Does not contain glycerin by-product.

SOPALEX 390 – LAURYL BETAINE

Similar properties to above but made from dimethylamine with a carbon distribution of C12 - 69.5%, C14 - 24.5%, C16 - 4.8%. Does not contain glycerin as a by-product

Alkyl Betaine (Sopalex)

