

Luxurious Lather



Crodasinic™ LS

Generating outstandingly rich, creamy lather, synonymous with quality and efficacy, the **Crodasinic LS** family of mild surfactants adds a touch of luxury to any cleansing system.



Crodasinic LS is a range of readily biodegradable, sulphate free surfactants and is now available without preservative or EDTA.

- Outstanding lathering, resistant to hard water and oily residues
- Mild, effective detergency
- Sulphate free and readily biodegradable
- Naturally substantive, giving a light conditioning effect
- Compatible with many cationic conditioning agents and germicides
- Preservative free and EDTA free grades available

Innovation you can build on™

CRODA

Today's formulators enjoy a plethora of choice when it comes to mild surfactants. Many different chemistries can deliver cleansing formulations with very good skin compatibility, whether used alone or in combination with commodity anionic surfactants. With such an array of choices, it's easy to lose sight of the performance differences between different mild surfactant chemistries. However, new lathering assessment work now serves to remind the personal care market of the unparalleled lathering abilities of the Crodasinic LS range of surfactants.

Luxurious lather

Lathering and foaming are not the same thing. Many simple surfactants can deliver lots of foam, quantifiable by Ross-Miles foam height measurements. However, big foams can be easily broken and feel thin, fragile and transient in use. Lather, on the other hand, refers to rich, creamy foam made up of small, tight bubbles that delivers the luxurious cleansing experience that is so desirable to the consumer.

Lather quality is quantifiable by assessing drainage time according to a method pioneered by Hart and DeGeorge¹. Figure 1 demonstrates the superior lathering performance of the Crodasinic LS technology when compared to other commonly used mild surfactants.

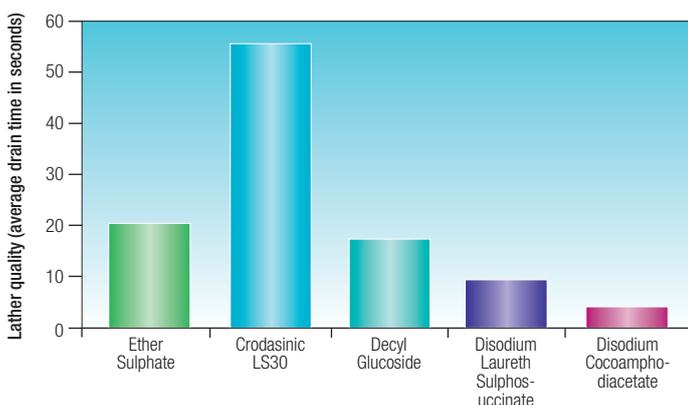


Figure 1: The results of lather quality assessments emphasise the outstanding capabilities of Crodasinic LS technology.

As shown in figure 2, maximum lather quality is achieved by using Crodasinic LS technology as a primary surfactant but Crodasinic LS surfactants can also be used as cosurfactants to dramatically enhance the lathering performance of commodity anionics.

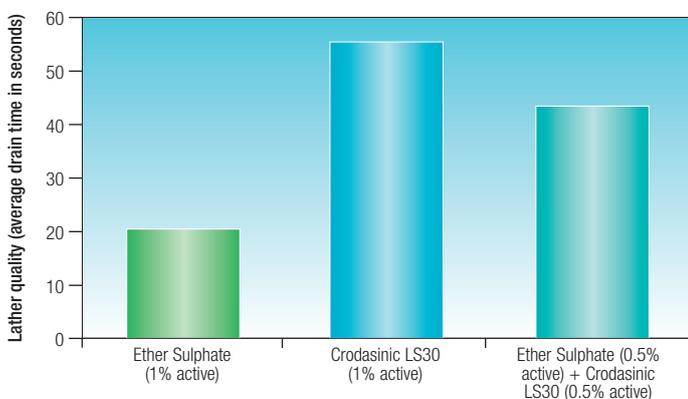


Figure 2: Superior lathering of Crodasinic LS30 as sole surfactant or co-surfactant

The lathering performance of Crodasinic LS chemistry has been shown to significantly outperform a number of commonly used mild surfactants. When these surfactants were blended with a commodity surfactant, Crodasinic LS once again showed superior lather quality, as demonstrated in figure 3.

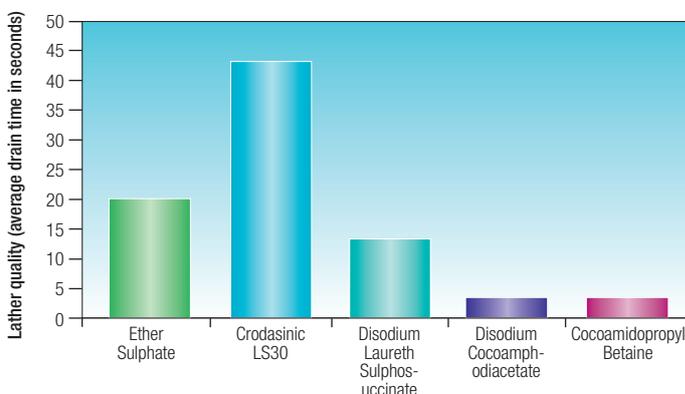


Figure 3: Superior lathering of Crodasinic LS30 as co-surfactant with ALES (50:50 blends)

It is easy to visually assess lather quality during execution of the Hart and DeGeorge method. Figure 4 shows a 'foam pillow' generated by Crodasinic LS30 whereas, in comparison, figure 5 clearly illustrates the inferior lathering properties of an Alkyl Polyglucoside.



Figure 4 : Photograph of Crodasinic L lather



Figure 5 : Photograph of APG lather

The robustness of lather is of critical importance. It is one thing for a surfactant to achieve good lathering in pure, distilled water in the laboratory but quite another for a surfactant to continue to deliver its rich, creamy lather in hard water and/or in the presence of oils. During cleansing, oily conditions are encountered in the form of soils such as sebum and make-up residues (the presence of such soils being the likely driver for the cleansing activity!). Oils may also be introduced with the surfactant in the form of lipophilic emollients in the formulation (e.g. cocoa butter).

In studies in distilled water one other chemistry type, Sodium Lauroyl Glutamate, gives comparable lathering performance to the Crodasinic LS chemistry. However, as shown in figure 6, the glutamate lathering collapses in the more challenging conditions of the consumer environment: the presence of soil and of both soil and hard water. Crodasinic LS retains good lathering performance in the consumer environment.