Globally, consumers increasingly make better educated purchase decisions, choosing innovative products which are more natural and sustainable. Without compromising on performance, Cargill offers you a range of nature-derived ingredients and the reformulation expertise to create products that perfectly match consumer demand, ultimately helping you achieve sustainable growth.

Based on polysaccharides of natural origin, Actigum™VSX 20 is a texturizing architect with many talents. It builds up the viscosity of your products and reinforces their stability. From an aesthetic perspective it delivers smoothness, delicate shine and lightness to creams, and helps produce translucent gels with a silky and brilliant texture. Across the board it provides good moisturizing benefits.

**NATURE WITHIN - A synergistic combination of Xanthan gum and Scleroglucan**

Actigum™VSX 20 texturizer is a rheology modifier that builds over the well-known properties of two highly safe and nature-derived ingredients:

- **Scleroglucan** is a natural origin polysaccharide produced by the aerobic fermentation of sugars with the fungus *Sclerotium rolfsii*. Its non-ionic character makes it compatible with a wide range of ingredients – usual electrolytes, all types of surfactants, glycols & polyols or alcohol – making it a versatile problem solver.

- **Xanthan gum** is produced by the aerobic fermentation of sugars by the bacterium *Xanthomonas Campestris*. Cargill’s Xanthan gum is used in a highly purified grade and has the ability to thicken alcohol up to 60%.

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RHEOLOGY - A shear thinning behavior
When shear stress is applied, Actigum™ VSX 20 texturizer’s viscosity drops. When shear stress ceases, the structure regains part of its original consistency. This property will help enhance users’ experience:
- it eases the flow of the product out of the packaging while avoiding drips and spills.
- as the structure of the product reconstitutes itself when the stress stops, the texture will pleasantly hold on the cotton or the skin, thus allowing a more pleasant application.

In addition, Actigum™ VSX 20 texturizer recovers some viscosity even when exposed to high temperatures – a useful asset in sun care formulation. The drop in viscosity of Actigum™ VSX 20 texturizer increases with the shear rate.

This property, combined with the specific conformation of the product, makes it a prime choice ingredient for sprayable formulas.

High Yield value
Actigum™ VSX 20 texturizer has a high yield value and, as a result, shows good suspending properties and allows creating emulsifier-free formulations. Moreover, its ability to prevent the coalescence of droplets makes it a good co-stabilizer (see figure 1).

APPLICATION BENEFITS
Skin & sun care
Actigum™ VSX 20 texturizer delivers good moisturizing properties with immediate and long-lasting benefits. This property has been substantiated by a study on a panel of 20 volunteers applying a cosmetic cream once a day during one month. Hydration was measured with a corneometer (see figure 2).

Toiletries & hair care
Actigum™ VSX 20 texturizer helps produce a fine foam. In shampoo, it improves foam stability and speeds up foam formation time. In addition, it makes combing easier and leaves a soft feeling on the hair.

In shower gels, it is easy to rinse and provides your skin with a very soft feel.

SENSORIAL PROPERTIES - Make it shiny
Actigum™ VSX 20 texturizer acts as a sensorial enhancer. It brings soft and silky textures to creams, providing them with an incomparable shine (see figure 3). In toiletries or hair care formulations, Actigum™ VSX 20 texturizer allows you to formulate the silky texture of gel, making it perfectly soft and extremely shiny with a pleasant after-feel.

APPLICATIONS
Skin care, sun care, hair care, bath & shower gel, etc.