Actigum™ VSX 20

The performant biopolymer that brings viscosity, suspension and sensoriality to complex formulas

Origin:
- INCI: Sclerotium Gum (&) Xanthan Gum
- Biopolymer obtained through a process of aerobic fermentation of sugars with strains of Non-GMO Sclerotium rolfsii and Xanthomonas campestris.
- Sources in the fermentation broth are of 100% vegetable origin: wheat & sugar beet.

Uniqueness:
- Synergy Scleroglucan & Xanthan gum
- Highly efficient thickener
- Performant suspending agent (≥0.3% dose)
- Emulsion stabilization aid
- Sensory enhancer aid
- Sprayable properties

Technical data:
- Dose of use: 0.1-2%
- Powder form
- Slightly anionic
- Cold/Hot processable
- Cold soluble
- Compatibility: electrolytes, surfactants, alcohol, preservatives

Compatibility:

<table>
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<th>NaCl %</th>
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<th>2</th>
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<table>
<thead>
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<th>pH</th>
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<tbody>
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<td></td>
<td>+</td>
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With most preservative systems

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Applications

When to use Actigum™ VSX 20?

- In formulations to increase viscosity and improve sensoriality at the same time
- In challenging formulations which contain high electrolytes, actives and/or alcohol concentration
- In challenging formulations that require a broad pH stability from low to high pH
- In formulations that require to suspend particles (exfoliating or decorative beads, pigments...)
- In sprayable formulations

Formulation tips

- Recommended equipment for cold or hot process:
  - Silverson® L5M-A : 8,000 rpm ≈ 5 min at room temperature
  - Ultra Turrax® T25 : 12,000 rpm, 15 - 20 min at room temperature
- Equipment only adapted for hot process:
  - VMI Turbotest® with dissolver (deflocculator) or Roto Stator: 1500 rpm, 30 min at 75°C
- Not adapted: any type of propeller, simple mixing
- The proportion of the rotor-stator and the vessel size impact the final result
- It is important to adapt the quantity of formula to the beaker
- Heating does not affect the final viscosity
- Cold process is possible and heating (75°C) will only make faster the deployment of the polymer
- Viscosity remains the same regardless the production process: batch to batch or semi continuous system from stock solution
- Batch size does not impact the viscosity during industrial scale-up
- Viscosity results in formulations predict the result in scale-up

Textures:

- Serum
- Gel
- Gel-cream
- Lotion
- BB cream
- Mask

Sensorial fingerprint: very pleasant, shiny, smooth, slightly fresh and light body

Viscosity = function of the time and speed gradient = f (t & G)

Product details

- CAS N° Sclerotium gum 39464-87-4  Xanthan gum 11138-66-2
- Packaging: 25 kg (net) PE bags hermetically sealed
- Shelf life after production date (months): 24
- IECIC listed

Contact us at: beauty@cargill.com

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