Cargill Beauty
Unleashing Nature
Sustainably

Actigum™ VSX 20

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

- **ISO 16128**
  100%
  NATURE DERIVED
- **COSMOS APPROVED**
- **READILY BIODEGRADABLE ACCORDING TO OECD 301 B[1]**
- **HALAL**
- **KOSHER**
- **VEGAN SUITABLE[2]**
- **MADE IN FRANCE**

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 efficent thickener
- Performant suspending agent (≥0.3% dose)
- Emulsion stabilization aid
- Sensory enhancer
- Sprayable properties
- Translucent formulas

Technical data:

- Dose of use 0.1-2%
- Powder form
- Slightly anionic
- Cold/Hot processable
- Cold soluble
- Compatibility: electrolytes, surfactants, alcohol, preservatives and high temperatures
- Premium version available: total plate count <100 cfu/g

Compatibility:

NaCl %	0	2
	+	+

Alcohol %	0	10	30
	+	+	+

pH	3	7	12
	+	+	+

With most preservative systems

Cargill® Helping the world *thrive*

Applications

Actigum™ VSX 20

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

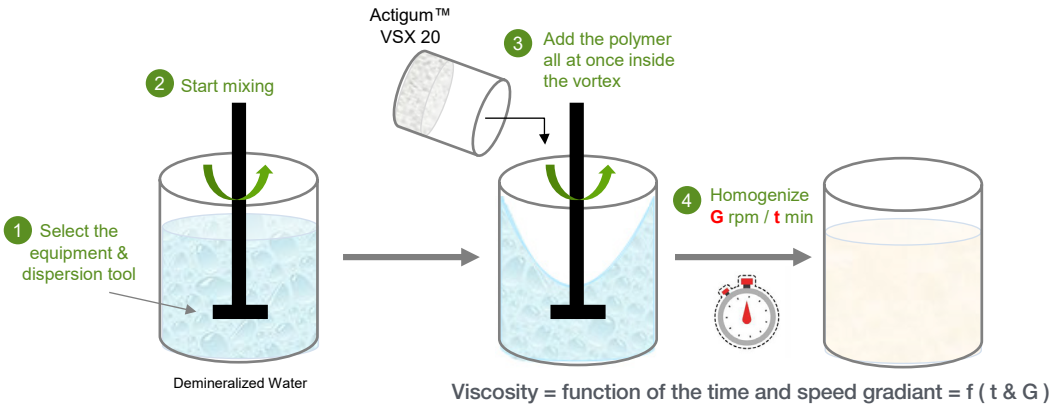
Textures:

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

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

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



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

[1] All the components of the raw material are readily biodegradable according to OECD 301 B.
[2] The responsibility of a vegan claim lies with the cosmetic manufacturer. Please consult your own legal or regulatory experts to ensure suitability of the product with your preferred standard.
[3] Product made to food grade GMPs and has not been tested in sunscreen. Manufacturer is responsible for compliance with US FDA sunscreen drug regulations.

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