

Technical Data Sheet of Sensogel™ 200

Product Description

Sensogel 200 is a novel rheology additive for the water phase of cosmetic products, and is consisted of a hydrophobic modified associative polymer, oil, emulsifiers, glycerin, and water. Through the hydrophobic association, the pendant hydrophobic groups of the associative polymer enhances its thickening power, its O/W emulsion stabilization ability, its own product stability, its synergy with other thickeners, and its electrolyte resistance. At the same time, it offers a fresh, soft, non-sticky elegant sensory at pick-up, rub-in, and after-application.

Legislation

- INCI HEA/Sodium Acryloyldimethyl taurate/Steareth-20 Methacrylate Copolymer (and) C13-C14 Isoalkane (and) Polysorbate 80 (and) Decyl Glucoside (and) Glycerin
- CAS # 1562424-82-7/246538-79-4/9005-65-6/68151-73-1, 110615-47-9/56-81-5
- EINECS Exempt/927-676-8 (or 920-901-0)/500-019-9/ 500-220-1, 600-975-8 /200-289-5

General Product Specification

<u>Item</u>	<u>Specification</u>
Appearance	Translucent to Opaque
Odor	None to slightly aliphatic
pH, 1.2% W/W dispersion in water, 25 C	6 - 8
Bulk Viscosity of Product, 25C/10 rpm/SP # 6	40,000 – 120,000 cP
1.2% W/W Dispersion In Water, Brookfield Viscometer, 25 Celsius/5 RPM/SP #3	10,000 – 40,000 cP
2% W/W Dispersion in Water, 25Celsius/5 RPM/SP #5	35,000 – 90,000 cP

----- Create Possibilities -----

Last product specification update: 6/7/2021, Last document update: 6/20/2021

Dry Residue %	44% - 54%
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Toxicological data:

- Repeated Insult Patch Test (RIPT)
 - Tested at a 5% Sensogel 200 aqueous solution on 54 subjects by Repeated Insult (occlusive) Patch Test over a period of 4 weeks. The lot of Sensogel 200 was laboratory prepared and was similar to the commercial Sensogel 200 in composition.
 - Test result: Sensogel 200 was “Dermatologist-Tested” and was not associated with skin irritation or allergic contact dermatitis in human subjects.
- Hen’s Egg Test Chorioallantoic Membrane (HET-CAM)
 - The test method was based on that described in INVITTOX. 1992. Protocol No. 47: HET-CAM Test. This test is a non-animal test alternative to the Draize methodology. Sensogel 200 was tested as a 5% aqueous solution from a laboratory prepared lot with similar composition to the commercial lots.
 - The irritation potential of 5% Sensogel 200 was determined to have The Irritation Score (IS) of zero. Its irritation potential was classified as none/slight.

Features/Benefits

- Easy Manufacturing
 - Stable product, no separation and no sedimentation
 - Steady dose response
- Easy Formulation/product development
 - Fresh, soft, easy absorbing, and non-tacky sensory
 - Safe, Free of hazardous Acrylamide monomer
 - Works in pH 2 -12, and cold/hot process
 - 3 -in-1 product: Emulsifier, thickener, and stabilizer in one Sensogel 200

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- Compatible with a wide range of polar solvents

Applications

- Fine, rich skin and hair care lotion, cream, and cream-gel with fresh, soft, easy absorbing, and non-tacky texture
- Low pH formulations: Skin peeling, Self-Tanning, Acne treatment, Hair color/Perm, Bleaching, etc.
- Sun care and after-sun products
- Facial mask sheets
- Cleansers, make-up remover, etc.

How to use it?

- 1- 4% in the O/W formulation without the emulsifiers
- 0.5 – 3% in the O/W formulation with the emulsifiers
- Can be incorporated in either the water phase or the oil phase, and can be hot or cold processed.
- Easy addition into the water phase: blend 1/1 of Sensogel 200 and any oil; add the blend into the water phase while mixing
- The processing at or above 50° C results in faster dissolution

Packaging

20 kg in 5 gallon plastic pail

Storage

- Store the product in its original package, sealed tightly, protect it from fire and high temperature
- After each use, seal the package immediately and tightly to prevent it from drying.

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