

CareSil™ Suspended Gel

CSG-1001

INCI Nomenclature: Aqua (and) Dimethicone (and) Dimethicone/ Vinyl Dimethicone Crosspolymer (and) Dimethiconol (and) Butylene Glycol (and) Carbomer (and) Phenoxyethanol (and) Sodium Hydroxide

Product Profile

CareSil™ CSG-1001 is the flagship product in our patented CSG technology platform. Our commitment to innovation led us to the development of SFS (Surfactant Free Silicone) emulsion technology – allowing a high purity silicone to be delivered in an aqueous gel, providing an ideal solution for skin perfecting formulations. CSG-1001 brings a unique bouncy texture: at first it is light and watery, yet creamy, followed by a matte cushiony feel, leaving your skin moisturized and protected.

Applications

- Moisturization
- Anti-Aging/Anti-Wrinkle
- Sunscreen, After-Sun, and Self-Tanners
- Skin Repair Serums
- Skin Tone Repair
- Men's Grooming
- Color Cosmetics

Features and Benefits

- Oil-in-water suspended gel
- Surfactant Free, Amodimethicone Free, Propylene Glycol Free, Chelating Agent Free, Silicone Membrane Free
- Silicone is stably suspended in the aqueous media without separation over time
- Ease of use: dispersed directly in the water phase
- Transformable texture: At first, a watery feel on one surface and a creamy texture on the other, both transforming into a matte cushiony feel
- Possible to formulate transparent cosmetic formulations

PROPERTIES	AVERAGE RESULT	STANDARD	NT-TM
Viscosity	165,000cP	ASTM D1084 ASTM D2196	001
Quantitative Analysis of Volatile Siloxanes (D4)	<0.05%	-	084
Appearance	Opaque, White Gel	ASTM D2090	002
Refractive Index	1.40	ASTM D1747 ASTM D1218	018
pH	6	ASTM E70 ASTM D4613 ASTM D1287 ASTM D1176	135

CSG-1001
 October 11, 2018
 Rev. C

Instructions for Use

CSG-1001 is very easy to use and versatile in any kind of formulation.

- It may be formulated into water-in-oil emulsions, water-in-silicone emulsions, oil-in-water emulsions and water-based formulations
- It is soluble in water, alcohol and hydroalcoholic systems
- The product can be directly incorporated in water phase of an emulsion formulation
- It can be post-added to emulsions
- It can be used with cold process and hot process
- Can be used with mixers and subjected to high-shear devices
- Resistant to $5.5 \leq \text{pH} \leq 7.5$
- Possible dilution with distilled water
- Any electrolyte containing ingredients, such as salt, need to be added at the end of the process

Achieving Transparency

CSG-1001 can deliver transparent finished formulations with a unique light & velvety feel.

- Match the refractive index by adding glycerin without sticky or greasy after feel
- Remove air bubbles under vacuum before neutralizing the water-based gel (carbomer, acrylate polymer) or at the end of the process

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Packaging

- 0.2 kg Sample
- 16 kg Pail
- 190 kg Drum

Use By

24 Months from Date
of Manufacture

Specifications

Do not use the properties shown in this technical profile as a basis for preparing specifications. Please contact NuSil Technology LLC for assistance and recommendations in establishing particular specifications.

Warranty Information

NuSil Technology LLC recommends using the material within 24 months of manufacture when stored below 40°C in original unopened containers. Unless NuSil Technology LLC provides a specific written warranty of fitness for a particular use, NuSil Technology LLC's sole warranty is that the product will meet NuSil Technology LLC's then current specification. NuSil Technology LLC specifically disclaims all other expressed or implied warranties, including, but not limited to, warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology LLC's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology LLC expressly disclaims any liability for incidental or consequential damages. NuSil Technology LLC makes no claim or warrant that this product is intended to affect the structure or any function of the human body.

Warnings About Product Safety

NuSil Technology LLC has tested this material to assess its compliance with the current specification requirements. NuSil Technology LLC recommends each purchaser ensure the material complies with all applicable laws, as well as complies with their applications specific safety protocol. NuSil Technology LLC suggests users further test CareSil™ materials to facilitate the safety and suitability of the material within their specific application requirements.

When considering the use of NuSil™ products in a particular application review the latest Safety Data Sheet and contact NuSil Technology LLC with any questions about product safety information.

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