



DOWSIL™ 9509 Silicone Elastomer Suspension **DOWSIL™ PF-9510 Silicone Elastomer Suspension**

INCI NAME: Dimethicone/Vinyl Dimethicone Crosspolymer (and) C12-14 Alketh-12

Features & Benefits

- Water-based suspension of elastomeric silicone powder.
- Ease of formulation.
- Cold processing.
- Imparts silky feel to skin.
- Reduces shine on skin (matte).
- Effectively controls sebum.

Applications

- DOWSIL™ 9509 Silicone Elastomer Suspension has been developed to facilitate the incorporation of an elastomeric silicone powder into water-based cosmetic products. It can be used in skin care, color cosmetics and body wash applications.
- DOWSIL™ PF-9510 Silicone Elastomer Suspension is an alternative-preservative version of DOWSIL™ 9509 Silicone Elastomer Suspension.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	DOWSIL™ 9509 Silicone Elastomer Suspension	DOWSIL™ PF-9510 Silicone Elastomer Suspension
Viscosity	mPa·s	~6700	~6200
Color		Milky white	Milky white
pH		3–4.5	3–7.5
Particle size D50	microns	< 4	< 4
Suitable diluent		Water	Water
Emulsifier type		Non-ionic	Non-ionic
Preservative system		Phenoxyethanol, chlorophenesin, methyl paraben, benzoic acid	Phenoxyethanol and Chlorophenesin
Non-volatile content	%	65–68	65–68
Cyclotetrasiloxane (D4) content	%	< 0.1	< 0.1
Cyclopentasiloxane (D5) content	%	< 0.1	< 0.1

Description

DOWSIL™ 9509 Silicone Elastomer Suspension is a non-ionic suspension of a spherical silicone elastomer powder in water.

How to Use

DOWSIL™ 9509 Silicone Elastomer Suspension should be formulated into the aqueous phase. Preferably it should be added last while mixing using moderate shear. The recommended addition level is 3 to 6% silicone active level.

How to Apply

The suspension can be added into the aqueous phase anytime but preferably at the end of the process. Also low molecular weight lipophilic fluids can be incorporated into the elastomer by direct addition to the suspension.

Benefits

1. Sensory Data

A hydrogel containing 10% DOWSIL™ 9509 Silicone Elastomer Suspension provides a less greasy and silkier feel to the skin compared to the control. The skin is also less shiny.

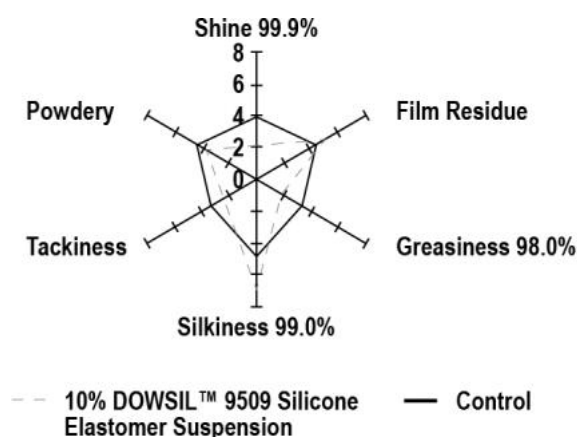


Figure 1: After absorption

2. Sebum Control Data

A hydrogel containing 8% DOWSIL™ 9509 Silicone Elastomer Suspension shows a decrease in the sebum present on the forehead over a 6 hour period compared to a control formulation containing volatile silicone oil.

A similar effect was achieved using an oil-in-water cooling gel containing 10% DOWSIL™ 9509 Silicone Elastomer Suspension compared to a control containing mineral oil.

Benefits (Cont.)

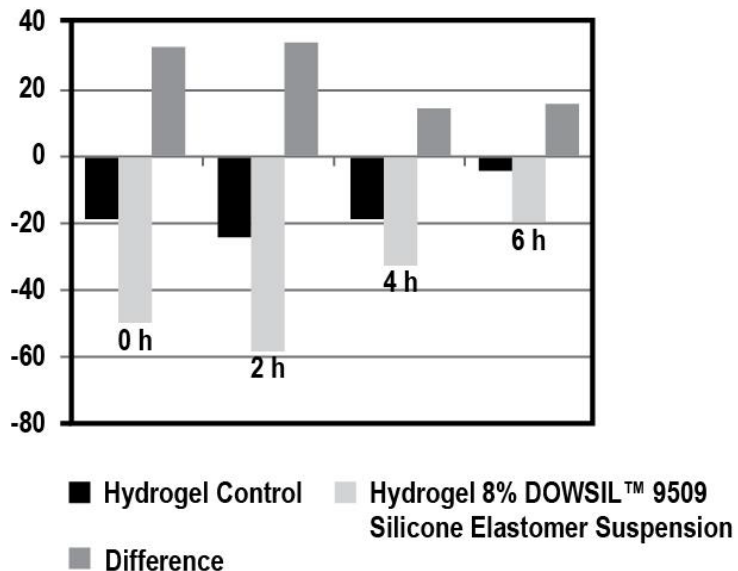


Figure 2: Sebum absorption on forehead hydrogel

3. Thickening Data

Addition of 6.35% DOWSIL™ 9509 Silicone Elastomer Suspension (4% active) into the water phase of a water-in-silicone emulsion can increase the viscosity of the formulation by 454%.

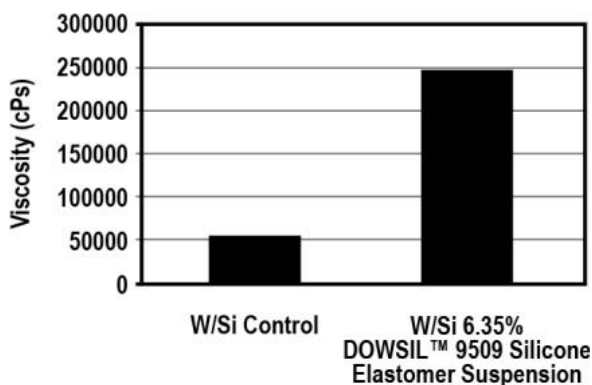


Figure 3: Thickening

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

When stored between 5°C (41°F) and 32°C (89°F) in the original unopened containers, this product has a usable life of 12 months from the date of production.

If separation occurs during storage, shake or mix well before use. Separation has no effect on product performance.

Packaging Information

This product is available in 18 kg pails. Samples are available in 100 g.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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