



ACULYN™ Siltouch Rheology Modifier

Versatile silicone-acrylate rheology modifier for light feel in skin care applications

Features & Benefits

- Efficient at building emulsion viscosity across a wide pH range
- Ease of use and cold processable
- Does not require neutralization
- Compatible with a variety of emollients
- Compatible with typical ingredients used in skin care formulations

Composition/INCI

- Sodium Acrylate/Sodium Acryloyldimethyl Taurate Copolymer (and) Dimethicone (and) Trideceth-6 (and) PEG/PPG -18/18 Dimethicone

Applications

- Skin care
- Sun care
- Color cosmetics
- Leave-in hair conditioners
- Hair treatments

Typical Properties

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

Property	Unit	Result
Appearance		White liquid emulsion
Solids	%	27
Solubilised viscosity at 1% ai in water (Brookfield RVT, 20 rpm, 25°C)	cPs	18000–25000
Bulk viscosity (Brookfield LVT, 30 rpm, 25°C)	cPs	1000–6000
Shelf life (when stored at 20°C in unopened containers)	Months	18
Recommended use level		2–7% as is
China regulations		Listed in the catalogue of Cosmetic Ingredients Used in China

Formulating Tips

ACULYN™ Siltouch Rheology modifier is a water phase rheology modifier for both aqueous formulations and emulsions. It can be added either to the oil phase or the water phase. It requires neither strong shear nor neutralization and thickens rapidly after addition with gentle mixing.

Oil-in-water emulsions can be easily prepared incorporating ACULYN Siltouch Rheology Modifier into the oil phase and then combining with the water phase. The oil phase containing ACULYN Siltouch Rheology Modifier can be added to the water phase (direct emulsification), or the water phase can be added to the oil phase (phase inversion process). Alternatively, ACULYN Siltouch Rheology Modifier can be added after emulsification. Regardless of which technique is used, the mixer speed should be increased as the formulation thickens to maintain good mixing. The maximum amount of oils that can be incorporated without the use of any additional emulsifying aid will depend on both the ACULYN Siltouch Rheology Modifier use level and the oil mix nature.

ACULYN Siltouch Rheology Modifier should be mixed before use.

Mechanism of Action

ACULYN Siltouch Rheology Modifier is a water-in-silicone emulsion containing an acrylate-based thickening polymer in the internal phase. When blended in water, it inverts rapidly, allowing the polymer to bloom in the aqueous phase and thicken. In this process, the dimethicone oil contained in ACULYN Siltouch Rheology Modifier gets emulsified, along with the others oils that may be present, creating an oil-in-water system.

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 WWW.CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

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, www.consumer.dow.com or consult your local Dow representative.

<http://www.consumer.dow.com>

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

