



Technical Data Sheet

DOWSIL™ 5-7113 Silicone Quat Microemulsion

INCI Name: Silicone Quaternium-16 (and) Undeceth-11 (and) Butyloctanol (and) Undeceth-5

Features & Benefits

- Nonionic microemulsion
- Clear formulations possible
- Heat protection
- Color protection
- Hair volume
- Reduced static
- Hair fiber alignment
- Shine
- Reduced drying time
- Reduction of hair dryness
- Reduction of hair breakage
- Hair slipperiness and smoothness
- Enhanced wet and dry combing

Applications

- Shampoos
- Rinse-off and leave-in conditioners
- Styling products

Typical Properties

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

Property	Unit	Result
Appearance		Translucent to transparent
Physical form		Liquid
Silicone content	%w/w	~22
Viscosity at 25°C	mm ² /s	10
Emulsifier type		Nonionic
pH		6–8
Suitable diluent		Water

Description	DOWSIL™ 5-7113 Silicone Quat Microemulsion is a 22% nonionic emulsion of a quaternized amino- functional silicone polymer. This emulsion was developed as a conditioning additive for hair care products such as shampoos, conditioners and styling aids. The product provides easy formulation and dilution stability.
Benefits	DOWSIL™ 5-7113 Silicone Quat Microemulsion delivers multiple benefits in hair care applications. It provides excellent wet and dry conditioning with added benefits of volume, shine, reduced drying time, color protection, heat protection and reduction of hair breakage.
How to Use	<p>To optimize the dispersion of DOWSIL™ 5-7113 Silicone Quat Microemulsion into the final formulation, it is recommended to add it slowly at the end of the formulating procedure at a temperature below 40°C (104°F) with continuous mixing or stirring.</p> <p>Recommended use levels for shampoo, conditioner and styling products is from 2 to 8%.</p>
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 CONSUMER.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 and 40°C in the original unopened containers, this product has a shelf life of 18 months. Protect from freezing.
Packaging Information	Multiple packaging sizes are available for this product.
Limitations	This product is neither tested nor represented as suitable for medical or pharmaceutical uses.
Health and Environmental Information	<p>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.</p> <p>For further information, please see our website, consumer.dow.com or consult your local Dow representative.</p>

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