

Technical Data Sheet

DOWSIL™ 979 Emulsion

INCI name: Amodimethicone (and) C11-15 Alketh-12 (and) C11-15 Alketh-7

Features & Benefits

- Superior conditioning with natural look
- Effective at low use levels
- Ease of formulation
- Enhanced wet & dry combing
- Reduced dry friction
- Enhanced sensory profile
- Reduced hair breakage
- Long-lasting hydrophobicity
- Fast drying
- Effective deposition
- Color protection
- Improved hair alignment
- Heat protection
- Shine
- Non-yellowing in formulation

Applications

Areas of potential use for DOWSIL $^{\rm IM}$ 979 Emulsion encompass a wide range of cosmetic and toiletry applications such as:

- Rinse-off conditioners
- Shampoos
- Sulfate-free shampoos
- Leave-on conditioners
- Styling conditioners
- Hair colorants

Typical Properties

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

Test ¹	Property	Unit	Result
CTM0176	Appearance		Milky white liquid
CTM0050	Viscosity at 25°C (77°F) – Brookfield RV, Spindle #4 @ 100 RPM	сР	~1200
CTM0862	Silicone content	wt%	~50
CTM0007	pН		~6
	Emulsifier type		Non-ionic
CTM0957	Particle size D50 (Malvern)	μM	< 0.5
	D4, D5, D6 Cyclics content	Wt %	< 0.1

^{1.} CTM: Corporate Test Method, copies of CTMs are available on request.

Description

DOWSIL™ 979 Emulsion is a 50% non-ionic emulsion of an amino functional silicone polymer. The amodimethicone polymer is delivered in an opaque, low viscosity liquid providing good stability with dilution. This emulsion was developed as a conditioning additive for hair care products such as shampoos, conditioners, styling aids and hair colorants.

Recommended Use Level

Recommended use levels: between 1 to 6 wt% (0.5–3% active silicone).

Use level can be adapted depending on applications and benefits sought.

Formulating Tips

DOWSIL™ 979 Emulsion can be easily added to aqueous based formulations.

To optimize the dispersion of DOWSIL[™] 979 Emulsion into the final formulation, it is recommended to add it slowly at the end of the process at a temperature below 40°C (104°F) with continuous mixing or stirring.

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 35°C (95°F) in the original unopened containers, this product has a usable life of 1.5 years from the date of production.

This product is susceptible to microbial contamination. Please use appropriate storage and handling procedures to prevent contamination.

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.

dow.com

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

