



Technical Data Sheet

DOWSIL™ MQ-1600 Solid Resin

FEATURES & BENEFITS

- Film former
- Easy to use flake delivery form
- Solvent free
- Permeable film
- Compatible with silicone and organic carriers.
- Excellent transfer and wash off resistance
- Sebum resistance
- Long lasting
- SPF enhancement potential
- Ease of formulation
- Non tacky feel when dried

COMPOSITION

- MQ silicone resin

INCI Name: Trimethylsiloxysilicate

APPLICATIONS

- Color cosmetics, skin care and sun care.

TYPICAL PROPERTIES

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

Property	Unit	Result
Appearance		White
Odor		Minimal
Specific gravity		1.23
Flash point (Closed cup)	°C	> 100

DESCRIPTION

DOWSIL™ MQ-1600 Solid Resin is 100% trimethylsiloxysilicate resin. This silicone resin provides excellent transfer and wash-off resistance. In sunscreens DOWSIL MQ-1600 Resin can enhance the SPF wash-off resistance.

HOW TO USE

DOWSIL MQ-1600 Resin can be dissolved in different organic and silicone oils up to concentrations of 50% or more. Table 1 details the compatibility with common cosmetic ingredients at 50% concentration. It is recommended to add the resin slowly to the oil under agitation to prevent the resin from forming aggregates that are difficult to re-disperse. DOWSIL MQ-1600 Resin increases the final viscosity of the carrier, depending on concentration and oil type, resulting in improved stability in emulsions and lipsticks.

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.

USABLE LIFE AND STORAGE

No special storage measures are required. When stored at or below 32°C in the original unopened container, the product has a usable life of 24 months.

PACKAGING INFORMATION

This product is available in 20 kg bags.

Samples are available in 500 g.

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.

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.

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Table 1: Compatibility of DOWSIL MQ-1600 Resin with Common Cosmetic Ingredients at 50%.

Common Cosmetic Ingredients	1:1
Water	NC
Ethanol	C
<u>Esters</u>	
Caprylic/Capric Triglycerides	C
C12-15 Alkyl Benzoate	C
<u>Hydrocarbons</u>	
Squalane	NC
Isododecane	C
Isohexadecane	C
<u>Silicones</u>	
XIAMETER™ PMX-1184 Silicone Fluid	C
XIAMETER™ PMX-200 Silicone Fluid 50 cSt	C
DOWSIL™ 556 Cosmetic Grade Fluid	C
DOWSIL™ FZ-3196 Fluid	C
NC: Not Compatible; C: Compatible	

Table 2: Performance of the film of DOWSIL MQ-1600 Resin.

Film surface properties		Film permeability	Wash-off resistance on the skin
Contact angle of water	Contact angle of artificial sebum oil	Water loss (g/m ² ·h)	Remains on the skin after 3 times washing (percentage)
105.8	45.2	87.74	72.7%

