



DOWSIL™ FC-5004 DM Silicone Resin Gum

INCI: Dimethicone (and) Trimethylsiloxysilicate/Dimethiconol Crosspolymer

Features & Benefits

- Film former
- Long lasting
- Non-occlusive
- Flexible film for comfort

Composition

- 40% polymer in a low viscosity dimethicone fluid

Applications

- Personal care applications including color cosmetic

Typical Properties

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

CTM ¹	Property	Unit	Result
0176B	Appearance		Clear to slightly hazy
0050EA	Viscosity at 25°C	mPa.s	200
0086 VI	Non-volatile content, 3–5 g/1 h/200°C	%	35–45
0910	Flash point – closed cup	°C	63

1. CTM: Corporate Test Method. Copies of CTMs are available on request.

Description

DOWSIL™ FC-5004 DM Silicone Resin Gum is made of approximately 40% of Trimethylsiloxysilicate / Dimethiconol Crosspolymer dissolved in a low viscosity dimethicone fluid. After evaporation of the dimethicone fluid, the silicone polymer forms a film on skin.

This silicone polymer is available in alternative carriers.

How to Use

The fluid can be easily incorporated into the oil/silicone phase of cosmetic formulations.

Formulation Tips

When heat is used, the material should be processed in an enclosed vessel to prevent the low viscosity dimethicone fluid volatilizing; the vessel should be inert at temperature over 35°C.

**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 -10°C and 35°C in the original unopened container, this product has a usable life of 1,800 days.

**Packaging
Information**

This product is available in 16 kg pail.

Samples are available in 390 g can.

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.

Table 1: Compatibilities with common cosmetic ingredients.

Ratio of DOWSIL™ FC-5004 DM Silicone Resin Gum: other material	1:9	5:5	9:1
Esters			
Caprylic/capric triglycerides	NC	NC	C
Isopropyl myristate	C	C	C
Isopropyl palmitate	C	C	C
C12-15 alkyl benzoate	NC	NC	C
Hydrocarbons			
Isohexadecane	C	C	C
Mineral oil	C	C	C
Hydrophilics			
Water	NC	NC	NC
Ethanol absolute 98%	NC	NC	C
Sunscreen agents			
Octyl methoxycinnamate			C
Vegetable oils			
Castor oil	NC	NC	NC
Joboba oil	NC	NC	C
Sunflower oil	NC	NC	NC
Silicones			
DOWSIL™ 556 Cosmetic Grade Fluid	C	C	C
DOWSIL™ FZ-3196 Fluid	C	C	C
XIAMETER™ PMX-200 Silicone Fluid 2 cSt	C	C	C
XIAMETER™ PMX-200 Silicone Fluid 5 cSt	C	C	C
DOWSIL™ 5562 Carbinol Fluid	C	C	C

C = Compatible
NC = Not Compatible

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.

