

#### Technical Data Sheet

## **DOWSIL<sup>TM</sup> ES-5227 DM Formulation Aid**

#### **FEATURES**

- Rake-type Silicone Polyether
- 25% dispersion of silicone polyether in a low viscosity, non volatile dimethicone fluid.

### **BENEFITS**

- Silicone Emulsifier
- Low to medium viscosity emulsions can be achieved
- Ease of use
- Cold or hot processing

INCI NAME: Dimethicone (and) PEG/PPG-18/18 Dimethicone

## APPLICATIONS

- Silicone emulsifier designed to prepare low to medium viscosity water-insilicone emulsions.
- Can be used in a wide range of cosmetic applications such as:
  - Color Cosmetics
  - Skin Care
  - Sun Care
  - Antiperspirants and Deodorants

## TYPICAL PROPERTIES

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

Test <sup>1</sup>	Property	Unit	Result
	Appearance		Grey white to milky white liquid
0004A	Viscosity	mm²/s	2000-10000
0001A	Specific Gravity		0.93
0021A	Flash point – Closed cup	°C	133
	Cyclotetrasiloxane (D4) content	%	< 0.1
	Cyclopentasiloxane (D5) content	%	< 0.1

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

#### DESCRIPTION

DOWSIL™ ES-5227 DM Formulation Aid is an ethoxylated and propoxylated silicone emulsifier.

Its primary function is to produce water-in-silicone emulsions with textures ranging from lotion to cream.

DOWSIL ES-5227 DM Formulation Aid is a 25% dispersion of silicone polyether in a low viscosity, nonvolatile Dimethicone fluid.

#### **HOW TO USE**

Stable emulsions can be prepared by adding slowly the water phase to the Silicone phase using a variety of common mixing devices.

The Silicone phase should be prepared first by mixing DOWSIL ES-5227 DM Formulation Aid with the selected Silicone oils.

High shear mixing at the end of the emulsification process is recommended to increase stability of the emulsion.

The recommended addition level goes from 4% for high W/Si-oil ratios and up to 16% for lower W/Si-oil ratios.

**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

When stored at or below 25°C in the original unopened containers, this product has a usable life of 24 months from the date of production.

# PACKAGING INFORMATION

This product is available in 18 kg pails, 190 kg drums and 900 kg IBCs.

Samples are available in 500 g bottles.

#### 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.

# 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.

www.consumer.dow.com



®Trademark of The Dow Chemical Company