



## Technical Data Sheet

### DOWSIL™ ES-5373 Formulation Aid

INCI name: PEG-12 Dimethicone

#### Features & Benefits

- O/W and Si+O/W emulsifier
- Water dispersible
- Low odor
- Low viscosity
- Cold or hot processing
- High oil phase load capacity
- Emulsifies a variety of oils including vegetable oils, esters & silicones

#### Composition

- Silicone polyether

#### Applications

- Silicone emulsifier designed for the preparation of oil-in-water (O/W) and silicone plus oils-in-water (Si+O/W) emulsions.
- Can be used in a wide range of skin care applications such as:
  - Low viscosity facial lotion
  - Sun care products
  - Foundation
  - Make up remover

#### Typical Properties

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

Test <sup>1</sup>	Property	Unit	Result
	Appearance		Colorless to light brown, transparent to translucent liquid at 25°C
0004A	Viscosity (25°C)	mm <sup>2</sup> /s	500–1200
	Calculated HLB <sup>2</sup>		8
	D4/D5 Level	%	< 0.1 / < 0.1
0001A	Specific Gravity (25°C)		1.041–1.063
0002	Refractive Index (25°C)		1.434–1.446

1. CTM: Corporate Test Method, copies of CTMs are available on requests.
2. Calculated HLB = Polyoxyethylene wt%/5.

Description	<p>DOWSIL ES-5373 Formulation Aid is a polyether functional siloxane supplied at 100% actives.</p> <p>Designed to produce O/W and Si+O/W emulsions with low viscosity and low odor.</p>
How To Use	<p>Stable oil-in-water and silicone plus oils-in-water emulsions can be prepared by direct aqueous addition with a recommended use level from 1.5% to 5% based on the oil phase ratio from 20% to 55%. Suitable for final formulation pH from 5 to 9.</p>
Handling Precautions	<p>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 <a href="http://WWW.CONSUMER.DOW.COM">WWW.CONSUMER.DOW.COM</a>, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.</p>
Usable Life And Storage	<p>When stored at or below 40°C (104°F) in the original unopened containers, this product has a usable life of 540 days from the date of production.</p>
Packaging Information	<p>This product is available in 18 kg drums and 200 kg drums.</p> <p>Samples are available in 1 kg cans.</p>
Limitations	<p>This product is neither tested nor represented as suitable for medical or pharmaceutical uses.</p>
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, <a href="http://www.consumer.dow.com">www.consumer.dow.com</a> or consult your local Dow representative.</p>

**Table 1**  
Compatibility of DOWSIL ES-5373 Formulation Aid with various cosmetic ingredients. The ratio of DOWSIL ES-5373 Formulation Aid: Solvent is 1:15.

Test material #	Test material (INCI name)	DOWSIL ES-5373 Formulation Aid
1	Cyclopentasiloxane	Slight hazy
2	Jojoba oil	Clear
3	Glycerin	Cloudy
4	Water	Cloudy
5	Ethylhexylmethoxy Cinnamate (OMC)	Clear
6	Caprylic/Capric Triglyceride	Clear
7	Mineral oil	Hazy
8	Squalance	Clear
9	Ethylhexyl Salicylate (OS)	Clear
10	Caprylyl Methicone	Slight hazy

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