

Dow Corning® 5225C Formulation Aid

FEATURES

- Provides an excellent delivery system for emollients, moisturizers, sunscreens, antiperspirant actives and pigments
- Gives stable water-in-silicone formulations
- Allows formulations flexibility
- Clear W/O emulsion technology possible

INCI Name: Cyclopentasiloxane (and) PEG/PPG-18/18 Dimethicone

APPLICATIONS

- Delivery systems for both non-polar and polar ingredients: non-polar ingredients are dissolved in the external silicone phase and polar ingredients in the internal aqueous phase.
- Can be used in a wide range of Personal Care 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. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Parameter	Unit	Value
Appearance		Translucent to hazy, slightly gray liquid. Slight sediment possible.
Odor		Characteristic odor
Specific gravity		0.956
Non-volatile content	%	10.5
Viscosity at 25°C	mm ² /s	100-6000
Flash point	°C	>77
Cyclotetrasiloxane (D4) content	%	<0.94

DESCRIPTION

Dow Corning® 5225C Formulation Aid is a 10% dispersion of high molecular weight silicone polyether in decamethylcyclopentasiloxane. It is a proprietary material designed specifically to prepare water-in-volatile silicone formulations.

HOW TO USE

Water-in-silicone emulsions can be easily prepared by slow addition of the aqueous phase to the oil phase using a variety of common mixing devices. The stability of the emulsions increases with the amount of shear used to form them. Since the aqueous phase is the internal phase of these

emulsions, increasing the proportion of water will increase the viscosity of a given formulation.

FORMULATION TIPS

1. Stir Dow Corning 5225C Formulation Aid thoroughly before use.
2. Add the water phase slowly to the oil phase using a high speed mixer.
3. Pass emulsion through a homogeniser (Silverson, Colloid Mill, Ultra Turax) to stabilise the product further.
4. Electrolytes, preferably NaCl at a level of 1 to 2% should be added to the water phase to ensure long term stability.

5. The emulsion can be made at ambient temperature if the formulation is free from solid ingredients.

REGULATORY STATUS

Dow Corning 5225C Formulation Aid is referenced in JCIC:

- Under the chemical name decamethylcyclopentasiloxane with the code 520778 for the CLS categories 1-11: No limit
- Under the chemical name poly (oxyethylene.oxypropylene) methyl polysiloxane copolymer with the code 521013 for the CLS categories 1-11: No limit.

HANDLING

PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. 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 FROM YOUR LOCAL DOW CORNING SALES REPRESENTATIVE.

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 19kg pails and 200kg drums.

Samples are available in 1kg packs.

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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning 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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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.

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