

Product Information

Dow Corning® OP-8800 Premium Hydrophilic Softener

Novel organofunctional silicone

FEATURES

- Provides premium softness
- Provides excellent hydrophilicity
- Contains nearly 100% actives
- Contains virtually no solvents or VOCs
- Provides high whiteness retention
- Low viscosity
- Makes shear-stable emulsions
- Makes high-pH-stable emulsions
- Compatible with stain-release finishing
- Exhaustible

APPLICATIONS

- Hydrophilic textile finishes
- Specialty textile finishing
- Softeners for stain release finishing systems

TYPICAL PROPERTIES

Specification Writers: Please contact your local Dow Corning sales office or your Global Dow Corning contact before writing specifications on this product.

Property	Unit	Unit
Appearance		Hazy to clear straw fluid
Viscosity at 25°C (77°F)	cSt	1,500

DESCRIPTION

Dow Corning® OP-8800 Premium Hydrophilic Softener is a novel organofunctional silicone copolymer designed for the formulation of premium textile finishes.

Dow Corning OP-8800 Premium Hydrophilic Softener offers an excellent balance of performance attributes ideal for today's demanding textile finishing applications that require multifunctional benefits. In addition, *Dow Corning* OP-8800 Premium Hydrophilic Softener is contains virtually no solvents or volatile organic compounds (VOCs) which makes it more environmentally sound and safer to use.

When applied to textile substrates *Dow Corning* OP-8800 Premium Hydrophilic Softener imparts premium hand while virtually maintaining the original substrate whiteness. Most importantly, *Dow Corning* OP-8800 maintains the natural absorbency of cellulosic substrates and their blends, and imparts hydrophilicity to most synthetic substrates. The hydrophilic properties imparted show practically no change with fabric aging or extreme drying conditions.

When properly formulated, emulsions based on *Dow Corning* OP-8800 Premium Hydrophilic Softener show excellent stability to high shear and to a broad pH range (up to pH 12) as well as very good compatibility and stability in baths containing common textile chemicals such as optical brighteners and residual electrolytes.

In addition, emulsions made using *Dow Corning* OP-8800 Premium Hydrophilic Softener show very good compatibility with stain release finishing systems, specifically those based on fluorochemicals, imparting very good softness with minimum-to-no impact on the stain release and oil repellency properties these provide.

HOW TO USE

Dow Corning OP-8800 Premium Hydrophilic Softener is a low viscosity silicone fluid that makes it easy to handle and formulate. Stable emulsions of *Dow Corning* OP-8800 Premium Hydrophilic Softener can be prepared using commonly available emulsifiers. A starting formulation and emulsification procedure are shown below, although other emulsification systems have also been shown to be effective as well. Please contact your local Dow Corning technical representative for additional information.

Suggested Starting Formulation

Product	%
<i>Dow Corning</i> OP-8800	
Premium Hydrophilic Softener	20.0
Acetic Acid (glacial)	0.3
Tridecyl alcohol ethoxylate, 6EO	9.0
Tridecyl alcohol ethoxylate, 9EO	3.0
Water 1	5.0
Water 2	5.0-7.0
Water 3	30.0
Water 4	Balance
<i>Kathon</i> [®] LX 1.5% ¹	0.02

¹Biocide, Rohm and Haas Corporation.

Method

1. Add *Dow Corning* OP-8800 Premium Hydrophilic Softener and acetic acid; mix 30 minutes.
2. Add emulsifier; mix 15 minutes.
3. Add first water; mix 30 minutes. Thorough mixing is required from this stage forward.
4. Add second water; mix 1 hour.
5. Add third water; mix 30 minutes.
6. Add last water and biocide; mix 30 minutes or until a uniform product is achieved.
7. Filter and drum off.

Note: Sample formulations are provided for illustrative purposes only. *Dow Corning* does not warrant their merchantability, fitness for use, performance, efficacy, safety, or freedom from patent infringement. They are not commercial formulations and they have not been subject to extensive testing. It is your responsibility to thoroughly test any formulation before use.

APPLICATION

Recommended application level is 0.5-1.0% *Dow Corning* OP-8800 Premium Hydrophilic Softener polymer on weight of fabric (owf) for conventional finishing applications. Emulsions based on *Dow Corning* OP-8800 Premium Hydrophilic Softener are slightly cationic and suitable for application by padding and/or exhaustion.

In stain release applications, the same amount of silicone solids owf as that of

the fluorochemical solids is recommended as a starting point.

HANDLING PRECAUTIONS

Contact with skin may cause irritation. Contact with the eyes will produce a slight, temporary discomfort and essentially no irritation.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT WWW.DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION.

USABLE LIFE AND STORAGE

When stored at or below 32°C (90°F) in the original unopened containers, *Dow Corning* OP-8800 Premium Hydrophilic Softener has a usable life of 12 months from the date of manufacture.

PACKAGING

Dow Corning OP-8800 Premium Hydrophilic Softener is available in 500-g, 18-kg, and 200-kg (1.1-, 39.7-, and 441-lb) containers.

LIMITATIONS

These products are 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 *Dow Corning's* 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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