



## Technical Data Sheet

# DOWSIL™ 9576 Smooth Away Elastomer

### FEATURES & BENEFITS

- Provides a light, silky after feel
- Optical blurring benefits
- Minimize appearance of pores
- Mask fine lines and wrinkles
- Slight sebum absorption

INCI Name: Dimethicone (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Dimethicone Crosspolymer (and) Beeswax (and) Silica (and) Silica Silylate

### APPLICATIONS

Can be used in:

- Skin care
- Color cosmetics
- Facial sun care

### TYPICAL PROPERTIES

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

Property	Unit	Result
Appearance		White to off-white gel. Free of particulate matter
Viscosity	mm <sup>2</sup> /s	150,000–600,000
Non-volatile content	%	15–17
Flash point (closed cup)	°C	74
Specific gravity		0.9
Cyclotetrasiloxane (D4) content	%	< 0.1
Cyclopentasiloxane (D5) content	%	< 0.1

### DESCRIPTION

DOWSIL™ 9576 Smooth Away Elastomer is a specially designed formulation consisting of a high molecular weight silicone elastomer, volatile dimethicone fluids, beeswax and cosmetic powders balanced together to achieve a unique skin aesthetics, smoothness and soft-focus benefits when formulated into skin care and color cosmetic products. The product has a viscosity of 150,000–600,000 cst, and non-volatile content of 15–17% solids.

### HOW TO USE

DOWSIL 9576 Smooth Away Elastomer may be formulated into oil-in-water emulsions, water-in-silicone emulsions, water-in-oil emulsions and anhydrous products to create unique beauty care products.

#### Formulation Tips:

- May be pre-mixed in an oil-phase or silicone phase in an emulsion formulation. When mixing with the other ingredients in the oil phase, insure that the oil phase is homogeneous.

- May be posted to emulsions provided the emulsion is viscous enough to allow the DOWSIL 9576 Smooth Away Elastomer to be adequately dispersed.
- Viscosity may be reduced by adding silicone fluids such as volatile dimethicone fluids or cyclomethicones.
- May be formulated with organic oils and silicone-based materials with the use of mixers and may be subjected to high shear such as homogenizers or sonicators.
- May be subjected to heating for a short time. When heat is necessary, it is recommended that DOWSIL 9576 Smooth Away Elastomer be processed in a closed vessel/container to prevent the loss of volatile silicone fluids. The vessel should be inerted at temperatures over 60°C. Heating at temperatures above 65°C will cause the beeswax to melt so mixing is recommended to maintain product homogeneity at these higher temperatures.
- Can be dispersed in a variety of organic oils. Please refer to the following compatibility tables and pictures of DOWSIL 9576 Smooth Away Elastomer in various cosmetic ingredients.

#### Processing

DOWSIL 9576 Smooth Away Elastomer is a viscous product that exhibits shear thinning behavior. The following information will aid in the selection of the proper equipment to use when processing DOWSIL 9576 Smooth Away Elastomer out of a drum:

#### Pump Recommendation

GRACO BULLDOG® 10:1 Pump with follower plate. For more information, contact GRACO at [www.graco.com](http://www.graco.com). Note: GRACO offers various models, and other pump

manufacturers may offer similar equipment equally capable of processing the material efficiently. Users should work directly with the pump manufacturer to determine the best design for their needs. Customer-specific pump design considerations:

1. **Pressure and flow requirements**
  - a. Air supply pressure: Will depend on plant's air supply capabilities.
  - b. Discharge pressure: Will depend on total pressure required to move the silicone organic elastomer blend from point A to point B. Pressure drops due to elevation, frictional losses within the piping, fittings, valves, filters, etc., will need to be considered.
  - c. Flow requirements: Will depend on how quickly the user wishes to transfer the silicone organic elastomer blend from a 208 liter (55 gallon) drum into a vessel.
2. **Material viscosity in cP (mPa·s) at the application temperature**  
DOWSIL 9576 Smooth Away Elastomer is shear thinning. It is the responsibility of the user to determine the effective viscosity based on the user's application. Once the material is pushed through the pump by the follower plate and processed in the pump, the product will shear thin and process as a lower viscosity fluid.
3. **Construction material for wetted parts**  
Stainless steel is recommended but carbon steel may also be used.
4. **Construction material for seals and gaskets**  
VITON® or TEFLON® materials are recommended.

#### Clean-up

Non-polar organic or silicone solvents are recommended for soaking or cleaning equipment.

**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](http://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 60°C (104°F) 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 15 kg pails and 170 kg drums. Samples are available in 500 ml 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](http://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](http://www.consumer.dow.com)**

UNRESTRICTED – May be shared with anyone  
®™ The DOW Diamond, XIAMETER and DOWSIL are trademarks of The Dow Chemical Company  
BULLDOG is a registered trademark of Graco Inc.  
Teflon is a registered trademark of E.I Dupont de Nemours and Company.  
Viton is a registered trademark of DuPont Performance Elastomers.  
DOWSIL™ 9576 Smooth Away Elastomer  
© 2017 The Dow Chemical Company. All rights reserved.

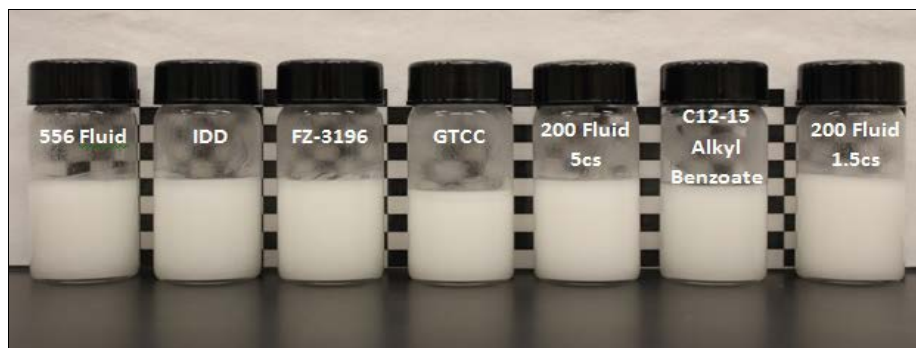
**Compatibility:**

**Table 1:** Compatibility of DOWSIL 9576 Smooth Away Elastomer with common cosmetic ingredients.

Cosmetic Ingredients (INCI)	DOWSIL™ 9576 Smooth Away Elastomer to Cosmetic Ingredient	
	20:80	80:20
XIAMETER™ PMX-200 Silicone Fluid 1.5 cSt	M	M
XIAMETER™ PMX-200 Silicone Fluid 5 cSt	M	S
DOWSIL™ 556 Cosmetic Fluid	M	M
DOWSIL™ FZ-3196 Fluid	M	PM
Isododecane	M	S
C12-15 Alkyl Benzoate	M	S
Caprylic/Capric Triglyceride	M	S

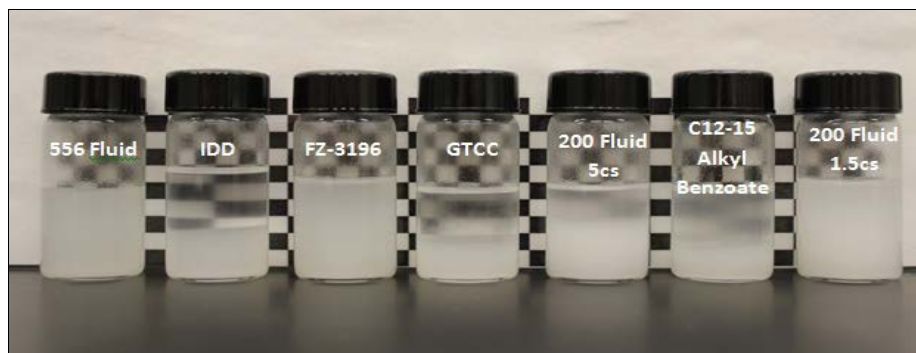
M: Miscible, S: Separates, PM: Partially miscible

**Figure 1.** Photograph of 80% DOWSIL 9576 Smooth Away Elastomer: 20% ingredient



Full product names are stated above in Table 1.

**Figure 2.** Photograph of 20% DOWSIL 9576 Smooth Away Elastomer: 80% ingredient



Full product names are stated above in Table 1.

