



Technical Data Sheet

DOWSIL™ SH 556 Fluid

INCI NAME: Phenyl Trimethicone

Features & Benefits

- Easily emulsified
- Good compatibility with cosmetic ingredients
- Resistant to oxidation
- Provides non-oily, easy to spread emolliency and allows natural skin transpiration through a soft invisible film
- Good anti-stick and anti-tack characteristics
- Imparts gloss, softness and better manageability to hair

Applications

- Used as a water repellent additive and to reduce the tackiness and stickiness of organic ingredients in formulations such as:
 - Skin lotions and creams
 - Suntan lotions and non-aerosol sprays
 - Pre-shave lotions
- Used as a hair gloss agent in non-aerosol hair sprays, conditioners and grooming aids

Typical Properties

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

Property	Unit	Result
Appearance		Colorless liquid
Viscosity at 25°C	mm ² s ⁻¹	22.5
Specific gravity at 25°C/15.6°C		0.980
Refractive index at 25°C		1.46
Flash point - closed cup	°C	> 100
Acid number	mg KOH/g	0.10

Description

DOWSIL™ SH 556 Fluid is a polyphenylmethylsiloxane which improves the performance of many types of cosmetic formulations. It has an excellent solubility in alcohol.

How to Use

DOWSIL™ SH 556 Fluid is easy to emulsify with standard emulsifiers by common techniques.

Solubility

DOWSIL™ SH 556 Fluid is extremely soluble in 95% ethanol at room temperature. At temperatures as low as 4°C, up to 50% by weight of this fluid can be dissolved in 95% ethanol.

Regulatory Status

DOWSIL™ SH 556 Fluid is referenced in JSCI under the chemical name Methylphenylpoly-siloxane with the code 104207 in the CLS categories: 111: No limit.

Table 1: Compatibility

Type of Material	DOWSIL™ SH 556 Fluid
Water	I ¹
Alcohols	
Ethanol (95%)	C
Ethanol (70%)	I
Isopropanol (99%)	C
Isopropanol (70%)	I
Stearyl alcohol	C
Solvents and propellants	
Aliphatic solvents	C
Cosmetic materials	
Beeswax	C
Lanolin	C
Mineral oil	C
Paraffin wax	C
Petrolatum	C
Isopropyl myristate	C
Glycerol	I

¹Fluids can be emulsified if water dispersibility is desired.

Proportions tested 10:1, 1:1 and 1:10. C = Compatible, I = Incompatible.

Handling Precautions

This product is not recommended for use in aerosol applications. Please refer to the linked Aerosol Guidance document, published by Silicones Environmental, Health, and Safety Center (SEHSC) for further information.

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 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 35°C in the original unopened containers, this product has a usable life of 30 months from the date of production.

Packaging Information

This product is available in 18 kg pails and 200 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, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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