



Technical Data Sheet

DOWSIL™ PMX-1504 Fluid

INCI NAME: C11-13 Isoparaffin (and) Isohexadecane (and) Dimethiconol

Features & Benefits

- Provides smoothness and slipperiness to hair
- Conditions hair
- Natural look
- Heat protection
- Readily biodegradable carrier

Applications

Areas of potential use for DOWSIL™ PMX-1504 Fluid encompass a wide range of cosmetic and toiletry applications such as:

- Hair Care
- Skin Care
- Color Cosmetics

Typical Properties

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

Property	Unit	Result
Appearance		Clear Fluid
Non-volatile content	%	26-28
Viscosity @ 25°C	cPs	25,000–35,000
Refractive Index		1.4251
Flash Point	°C	> 95
Cyclotetrasiloxane (D4)	%	< 0.1
Cyclopentasiloxane (D5)	%	< 0.1
Cyclohexasiloxane (D6)	%	< 0.1

Description

DOWSIL™ PMX-1504 Fluid is blend of approximately 27% ultra high viscosity dimethiconol in a volatile blend of hydrocarbons.

Formulation Tips

Emulsion Products:

DOWSIL™ PMX-1504 Fluid can be incorporated directly into the oil phase of the formulation. If formulating at temperatures above 70°C, it is recommended to DOWSIL™ PMX-1504 Fluid slowly after the formation of the emulsion at temperatures below 60°C (140 °F), using a high shear mixer.

Non-Emulsion Products:

It is recommended to add cosmetic ingredients to the gum blend and not vice versa to avoid the dimethiconol gum precipitating out of the solution due to an incompatibility with other cosmetic ingredients.

Compatibility

Table 1: Compatibility with common personal care materials.

	Silicone Gum Blend:Solvent					
	XIAMETER™ PMX-1501 Fluid			DOWSIL™ PMX-1504 Fluid		
	9:1	1:1	1:9	9:1	1:1	1:9
Esters						
C12-15 Alkyl Benzoate	NC	NC	NC	C	NC	NC
Caprylic/Capric Triglyceride	NC	NC	NC	C	NC	NC
Isopropyl Myristate	NC	NC	NC	C	C	C
Isopropyl Palmitate	NC	NC	NC	C	NC	NC
Octylpalmitate	NC	NC	NC	NC	NC	NC
Isodecyl Neopentanoate	C	C	C	C	C	C
Fatty Alcohols/Acids						
Octyldodecanol	NC	NC	NC	NC	NC	NC
Hydrocarbons						
Mineral Oil	NC	NC	NC	NC	NC	NC
Isohexadecane	C	C	C	C	C	C
Isododecane	C	C	C	C	C	C
C11-13 Isoparaffin	C	C	C	C	C	C
Hydrophilics						
Water	NC	NC	NC	NC	NC	NC
Propylene Glycol	NC	NC	NC	NC	NC	NC
Ethanol 200 Proof	NC	NC	NC	NC	NC	NC
Vegetable Oils						
Almond Oil	NC	NC	NC	NC	NC	NC
Castor Oil	NC	NC	NC	NC	NC	NC
Coconut Oil	NC	NC	NC	NC	NC	NC
Jobba Oil	NC	NC	NC	NC	NC	NC
Sesame Oil	NC	NC	NC	NC	NC	NC
Sunflower Oil	NC	NC	NC	NC	NC	NC

**Compatibility
(Cont.)**

Table 1: Compatibility with common personal care materials. (Cont.)

	Silicone Gum Blend:Solvent					
	XIAMETER™ PMX-1501 Fluid			DOWSIL™ PMX-1504 Fluid		
	9:1	1:1	1:9	9:1	1:1	1:9
Silicones						
Dimethicone, 2 cSt	C	C	C	C	C	C
Dimethicone, 5 cSt	C	C	C	C	C	C
Dimethicone, 350 cSt	C	C	C	C	C	C
Cyclopentasiloxane	C	C	C	C	C	C
Cetyl Dimethicone	NC	NC	NC	NC	NC	NC
Phenyl Trimethicone	C	C	C	C	C	C
Caprylyl Methicone	C	C	C	C	C	C
Bio-Derived						
C13-15 Alkane	NC	C	C	C	C	C
Undecane (and) Tridecane	C	C	C	C	C	C
Coco-Caprylate/Caprates	NC	NC	NC	NC	NC	NC
C15-19 Alkane	C	C	C	C	C	C

C: Compatible, NC: Not Compatible / Separation

**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 DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

**Usable Life and
Storage**

Product should be stored at or below 25°C (77°F) in original, unopened containers.

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

DOWSIL™ PMX-1504 Fluid is blend of an ultra high viscosity dimethiconol in a volatile blend of hydrocarbons.

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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