Technical Data Sheet

XIAMETER™ PMX-3021 Fluid

INCI Name: Cyclopentasiloxane (and) Phenyl Trimethicone (and) Dimethiconol (and) C12-15 Alkyl Benzoate (and) Dimethicone Crosspolymer

Features & Benefits

- Silicone Fluid Blend
- Colorless
- Low viscosity fluid
- Conditions hair
- Imparts soft, smooth and silky feel
- Excellent spreading
- Detackification
- Non-greasy, non-oily
- Enhances shine and gloss
- Emollients & moisturizers

Applications

- XIAMETER™ PMX-3021 Fluid is a silicone fluid for personal care applications, with excellent aesthetics, spreading, easy rub-out, lubrication properties, non-greasy and detackification
- In Hair Care, Silky Hair Spray/Liquid, and Leave-on Conditioner applications, it can provide conditioning benefits with a soft, smooth, silky, non-greasy/non-oily feel
- In skin care applications, it can provide emolliency, moisturization, fast and even spreading, a light and non-oily/non-greasy feel
- It also can be used in color cosmetic and antiperspirant/deodorant applications

Typical Properties

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

Property	Unit	Result
Appearance		Clear, Colorless liquid
Specific gravity at 25°C		0.95
Viscosity at 25°C	cps	10

Description

XIAMETER PMX-3021 Fluid is a silicone fluid blend that is clear, colorless, non-greasy and non-oily. It can provide a soft, smooth, silky feel and conditioning effect for the hair. (Refer to Figures 1–5.) In skin care applications, it can provide detackification in emollients & moisturizers and a light and excellent feel. Main applications are leave-on conditioners, hair sprays/liquids and skin care applications such as creams and lotions.

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Description (Cont.)

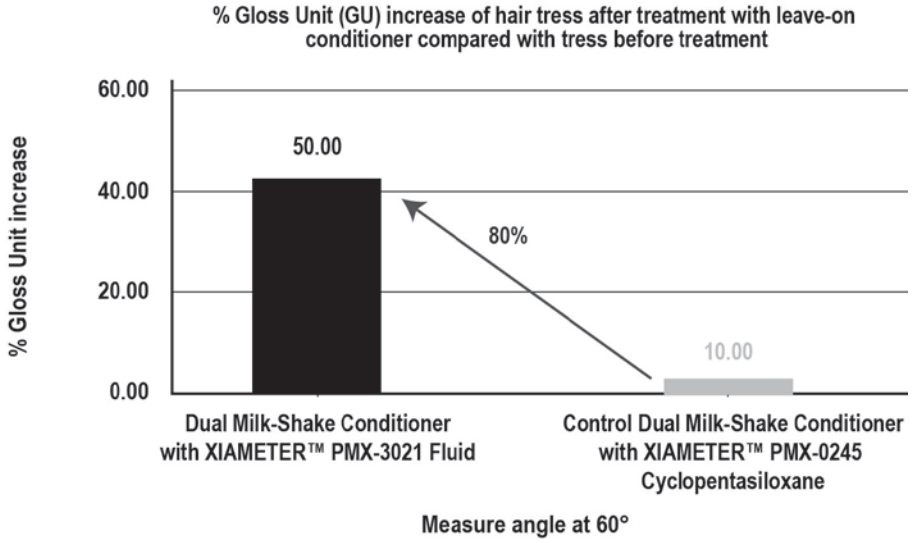

Figure 1:
% Gloss unit increase after treatment with hair leave on conditioner with XIAMETER PMX-3021 Fluid: Dual Milk-Shake Conditioner.

Measure for % Gloss Unit (GU) increase after treatment with Dual Milk-Shake Conditioner
Measure for % Gloss Unit (GU) increase after treatment with Dual Milk-Shake Conditioner and its control
Micro Tri Gloss (consider % GU increase at 60°)
Dual Milk-Shake Conditioner (CPF number 1278) shows significant increase for the gloss unit after treatment on hair tress (up to 50%) and also it has more % Gloss unit increase when compared with its control (up to 80%).

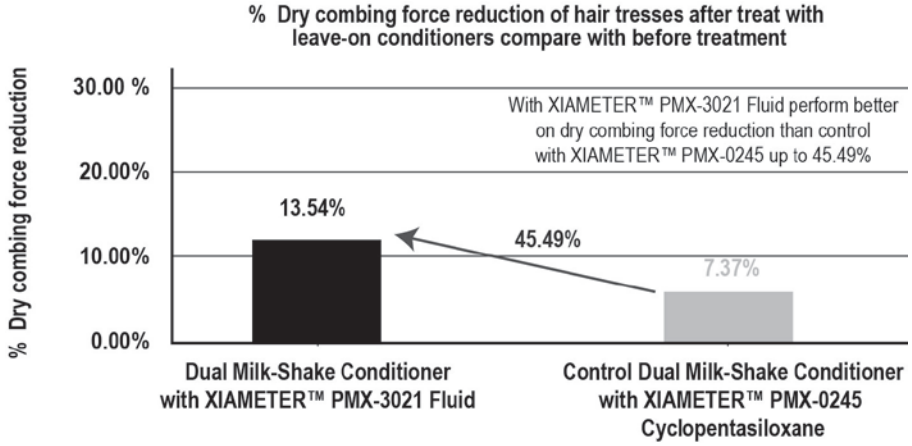

Figure 2:
% Dry combing force reduction of hair tresses after treatment with Dual Milk-Shake Conditioner with XIAMETER PMX-3021 Fluid and its control with XIAMETER™ PMX-0245 Cyclopentasiloxane.

Measure for % Dry combing force reduction of hair tresses after treatment with Dual Milk-Shake Conditioner and its control
Instron Combing machine
Dual Milk-Shake Conditioner (CPF number 1278) can reduce dry combing force after treatment up to 13.54% and perform better than treatment with its control (control Dual Milk-Shake conditioner) up to 45.49%.

Description (Cont.)

Sensory evaluation results for hair tress treated with Dual Milk-Shake conditioner compare with its control using XIAMETER PMX-0245 Cyclopentasiloxane

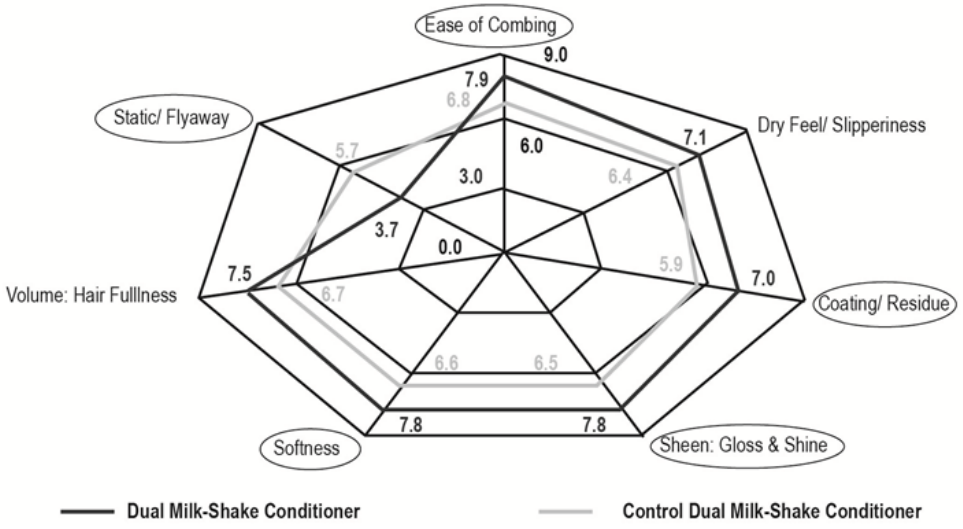

Figure 3:
Sensory evaluation results for hair tresses treated with Dual Milk-Shake Conditioner compared with control conditioner with XIAMETER PMX-0245 Cyclopentasiloxane by panelist test.

Sensory evaluation for hair tresses after treated with Dual Milk-Shake Conditioner compared with its control by panelist test.
Sensory evaluation by 15 panelists
Dual Milk-Shake Conditioner (CPF number 1278) show better on sensory for all attributes compared to its control using with XIAMETER PMX-0245 Cyclopentasiloxane fluid especially for Ease of combing, Softness, Gloss & Shine and less Static/ Flyaway.

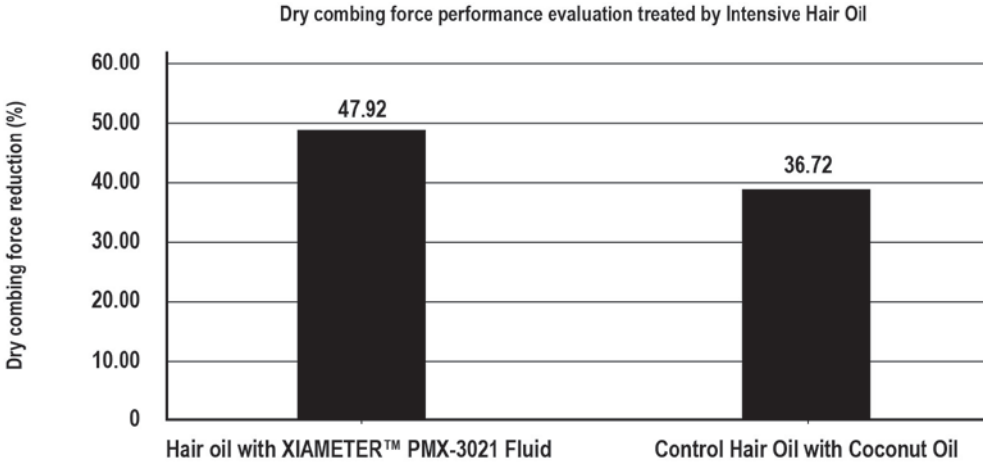

Figure 4:
% Dry combing reduction test results of intensive hair oil with XIAMETER PMX-3021 Fluid compared with control hair oil without silicone.

Instron Combing machine
Intensive Hair oil with XIAMETER PMX-3021 Fluid treated on hair tress can reduce % dry combing force up to 47.92% and also show better performance on % dry combing force reduction than control hair oil without silicone.

Description (Cont.)

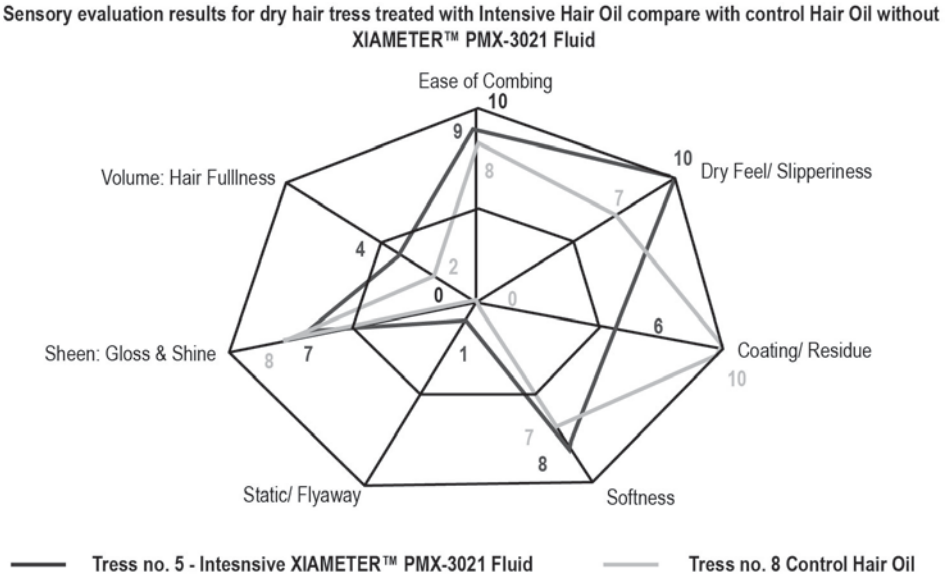

Figure 5:
Sensory evaluation results for hair tress treated with intensive hair oil compared to hair tress treated with control hair oil without XIAMETER PMX-3021 Fluid by panelist test.

Sensory evaluation by 10 panelists
Intensive Hair oil with XIAMETER PMX-3021 Fluid provides better sensory feel on hair tresses as voted on by panelists – especially for increased hair body/volume, increased hair softness, increased slipperiness by improving the dry feel and less greasy feel when compared with control hair oil without silicone.

How To Use

XIAMETER PMX-3021 Fluid may be blended with other cosmetic fluids to provide a fluid base for a variety of cosmetic ingredients, such as sunscreen agents, vitamins, etc.

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

Benzoates are used as preservatives in the formulation. Specific restrictions on finished consumer products may apply by regulatory bodies in different countries.

Aspiration or inhalation of an aerosol of oily or fatty-type materials into the alveolar region of the lung can cause chemical pneumonitis, lipoid pneumonia, and petroleum distillate pneumonitis; all terms that describe pulmonary (deep lung) tissue damage, edema, fibrosis, or other inflammatory changes in the lungs. Consult SEHSC Guidance for Aerosol Applications of Silicone-Based Materials when considering a consumer aerosol application.

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, www.consumer.dow.com or consult your local Dow representative.

http://www.xiameter.com