Technical Data Sheet

XIAMETER™ MEM-0949 Emulsion

INCI NAME: Amodimethicone and cetrimonium chloride and trideceth-12

Features & Benefits

- Easy to formulate into hair treatment products
- Dilutable in water
- Reduced combing time on wet hair
- Does not give a heavy effect on dried hair

Applications

- A very good conditioning additive especially when formulated into leave-on and styling products
- Can be used to formulate other types of products such as perms and colorants
- Conditioning agent

Typical Properties

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

Property	Unit	Result
Color		Milky white
Physical form		Water-thin liquid
Silicone content	%w/w	35
Viscosity at 25°C (77°F)	mm^2/s	5
Emulsifier type		Cationic
pH		7.5
Suitable diluent		Water

Description

XIAMETER™ MEM-0949 Emulsion is a 35% cationic emulsion of an amine-functional silicone polymer. The amodimethicone actives are delivered in an opaque, low viscosity liquid with a neutral pH. This emulsion was developed as a conditioning additive for hair care products such as shampoos, conditioners, styling aids and hair colorants. This product provides easy formulation and good dilution stability.

Form No. 95-943-01 A

Description (Cont.)

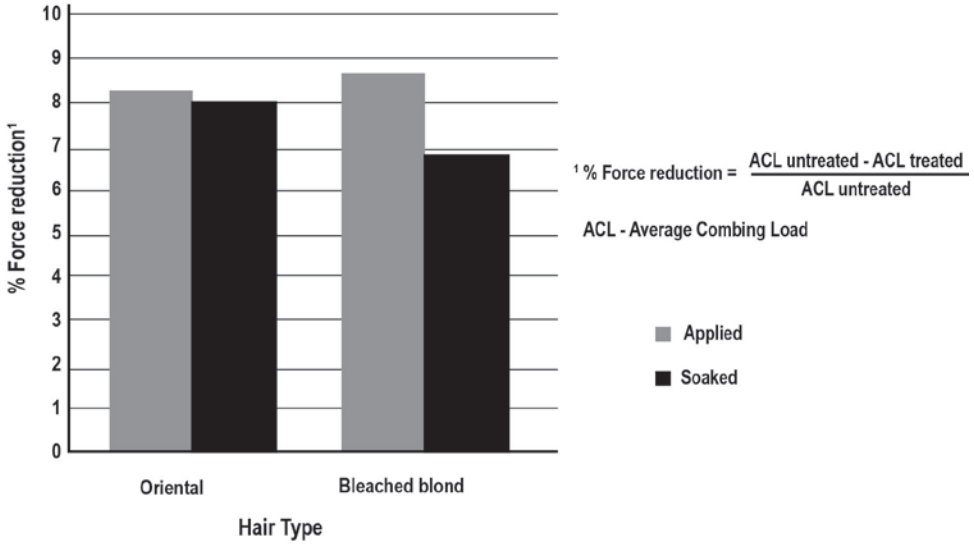

Figure 1: Instron® wet combing evaluation – 1mg silicone applied to 2g hair tress.

Conditioning Benefits

The conditioning benefits of XIAMETER MEM-0949 Emulsion have been demonstrated on the diluted product. Results are shown in Figure 2. In addition, XIAMETER MEM-0949 Emulsion does not give a heavy effect on dried hair as demonstrated in Figure 3 via the curl retention test.

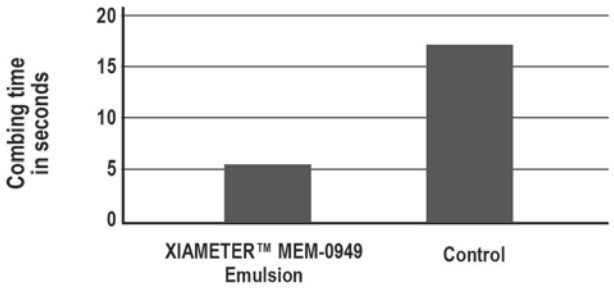

Figure 2: Wet combing : 6% XIAMETER MEM-0949 Emulsion in water.

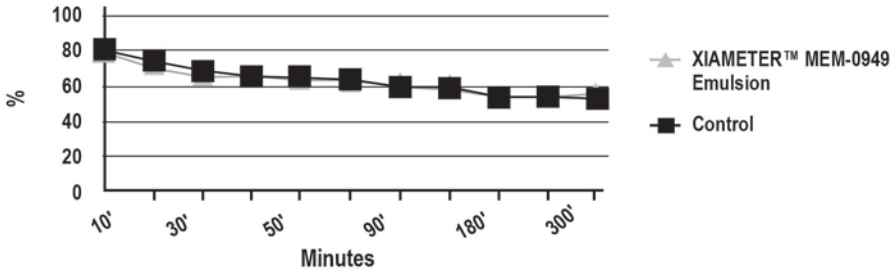

Figure 3: Curl retention test : 6% XIAMETER MEM-0949 Emulsion in water.

Compatibility

XIAMETER MEM-0949 Emulsion can be formulated into systems containing different types of surfactants: anionic, cationic and non-ionic.

How To Use

To optimize the dispersion of XIAMETER MEM-0949 Emulsion into the final formulation, it is recommended to add it slowly at the end of the procedure at a temperature below 40°C (104°F) with continuous mixing or stirring. Recommended use levels for conditioners is 5% and styling products 0.5 to 5.0%.

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

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.

Usage Life And Storage

Product should be stored at or below 32°C (89.6°F) in original, unopened containers.

This product is susceptible to microbial contamination. Please use appropriate storage and handling procedures to prevent contamination.

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.

FORMULATIONS

A. 2-in-1 Shampoo, ref. 12702/14-3.

Ingredients	Weight %
1. Texapon® A 400	30.0
2. Comperlan® KD	3.0
3. Carbopol® ETD 2020 (sol 2%)	30.0
4. XIAMETER MEM-0949 Emulsion	4.0
5. Preservative	q.s.
6. Perfume	q.s.
7. Water	up to 100
Suppliers	**INCI Name**
1. Henkel	Ammonium lauryl sulphate
2. Henkel	Cocamide DEA
3. Goodrich	Acrylate/C1030 alkyl acrylate crosspolymer
4. Dow	Amodimethicone and cetrimonium chloride and trideceth-12
Indicative viscosity: 7500mm²/s	

Procedure

A. Heat 1 and 3 to 65°C (149°F) and mix until uniform, then add 2, mix until complete solubilisation.
B. Turn off heat and add 7.
C. When temperature is less than 40°C (104°F) add 4, 5 and 6 with strong agitation.
D. Adjust pH to 7 with triethanolamine.
E. Adjust viscosity with sodium chloride if necessary.

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