



Technical Data Sheet

XIAMETER™ MEM-8177 Emulsion

INCI NAME: Amodimethicone (and) C12-14 Sec-Alketh-7 (and) C12-14 Sec-Alketh-5

Features & Benefits

- Superior conditioning agent (reduced wet detangling time and fly-away; improved shine).
- Improves hair color depth and longevity from semi-permanent colorant.
- Enables clear aqueous based systems.
- Easy to formulate (cold process manufacturing; no need of suspending agent; low viscosity, external phase water).

Applications

XIAMETER™ MEM-8177 Emulsion is designed especially for ease of incorporating amino functional dimethyl polysiloxane into water-based hair care products to provide superior conditioning and color improvement in:

- Clear and opaque 2-in-1 added value conditioning shampoos.
- Added value leave on conditioners (mask, pomade, ethnic care).
- Longer lasting semi-permanent colorants, permanents and relaxers.
- Styling aids (mousses, gels, lotions and pomades).

Typical Properties

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

Property	Unit	Result
Silicone content	wt%	14
Internal phase viscosity	cPs	15,000
Emulsion viscosity	cPs	5
Emulsion color		Translucent
pH		6.0
Suitable diluent		Water
Emulsifier type		Non-ionic
Microbiological evaluation	cfu/ml	< 10
Particle size	nm	15
Cyclotetrasiloxane (D4) content	%	< 1

Description

XIAMETER™ MEM-8177 Emulsion is a 14% non-ionic microemulsion of a high molecular weight amino functional dimethyl polysiloxane fluid (see Figure 1) designed specifically for use in clear hair care products. This emulsion is preserved with a blend of 2-phenoxyethanol and 3-iodo-2-propynylbutyl carbamate.

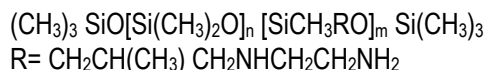


Figure 1: Chemical Formula For Amodimethicone.

How to Use

This product is best added below 40°C (104°F), at the end of the formulation process to minimize risk of emulsion separation. The recommended concentration level is 2 to 10% in clear hair care products.

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.

Not for use in consumer spray applications.

Studies of the amino-functional silicone contained in this product indicate that laboratory rodents exhibit high inhalation toxicity when exposed to an undiluted aerosol spray.

Usable Life and Storage

Product should be stored between 3°C (37.4°F) and 40°C (104°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

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.

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