

#### **Technical Data Sheet**

### **DOWSIL™ CE-1688 Emulsion**

INCI Name: Dimethicone (and) Amodimethicone (and) Laureth-23 (and) Polyquaternium-10 (and) Laureth-4

## Features & Benefits

- Based on high-molecular weight polydimethylsiloxane fluid and amodimethicone fluid
- Nonionic emulsion
- Significantly improves the wet and dry feeling of shampoo
- Smooth and soft feeling during rinse-off
- Easy to formulate

### **Applications**

- 2-in-1 hair shampoo
- Rinse-off conditioner

### **Typical Properties**

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

CTM <sup>1</sup>	Property	Unit	Result
	Appearance		Milky emulsion
0208	Non-volatile content (NVC)	%	62–68
0007	рН		5.5–8.5
	Emulsifier type		Non-ionic
0957	Particle size	μm	18–28
0050	Viscosity at 25°C (77°F)	mPa·s	20000–50000

<sup>1.</sup> CTM: Corporate Test Method, copies of CTMs are available upon request.

### **Description**

DOWSIL™ CE-1688 Emulsion is a 60% emulsion of high-molecular weight polydimethylsiloxane fluid and amodimethicone fluid designed to provide superior wet and dry sensory performance (Figure 1,2). It is ideal for use in 2 in 1 hair shampoos and rinse-off hair conditioners.

#### **How to Use**

DOWSIL™ CE-1688 Emulsion is water dilutable. Thus it is easy to formulate with. The recommended usage level is 1–3%. It is recommended to add the product below 45°C (113°F) in order to minimize the risk of emulsion instability.

### 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

When stored at or below 45°C (113°F) in the original unopened containers, this product has a usable life of 18 months from the date of production.

# Packaging Information

This product is available in 200 kg drum.

Samples are available in 500 g bottle.

### 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.

Form No. 27-2426-01-0124 S2D

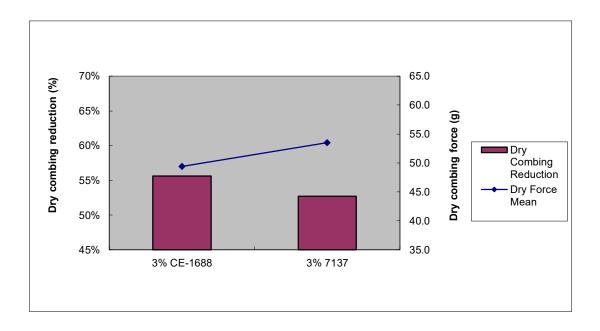


Figure 1: Dry combing performance

There is no difference between the shampoo with 3% DOWSIL™ CE-1688 Emulsion and the one with 3% XIAMETER™ MEM-7137 Emulsion on dry combing performance.

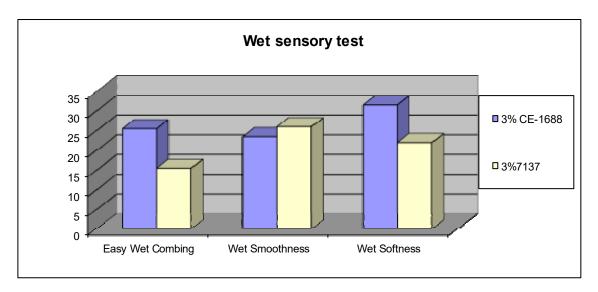


Figure 2: Wet sensory performance

The shampoo with 3% DOWSIL™ CE-1688 Emulsion is better than the one with 3% XIAMETER™ MEM-7137 Emulsion on wet combing and wet softness performance.

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