

# Dow Corning® CE 8401 Emulsion

## FEATURES

- Nonionic emulsion
- Unique amino silicone polyether structure

## BENEFITS

- High performance conditioning
- Excellent wet and dry combing
- Superior wet and dry sensory feel
- Color protection
- Curl retention
- Adds body and wave to hair
- Emulsion form makes formulating easy

## INCI Name:

Bis-Isobutyl PEG/PPG-20/35/Amodimethicone Copolymer (and) Cetyl Ethylhexanoate (and) Polysorbate 80 (and) Butylene Glycol.

## APPLICATIONS

- Range of hair care products including shampoos, rinse-off and leave-on hair conditioners and styling products.
- Particularly suited for applications where high performance conditioning is required e.g. moisturizing products, for dry, damaged, colored or chemically treated hair.

## TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test	Unit	Value
Appearance		Milky white liquid
Silicone Content	%	21.5
Viscosity at 25oC (77oF)	mPa.s	200
pH		3.0 – 7.0
Emulsifier Type		Nonionic

## DESCRIPTION

*Dow Corning*® CE 8401 Emulsion is an amino silicone polyether emulsion. The structure of the polymer is unique in that it is a block copolymer of amino silicone and polyether segments. In contrast traditional polyethers are a rake structure. This translates to unique conditioning performance (refer to Charts 1, 2 and 3). Enhanced conditioning performance can be achieved even at low usage levels (0.5% active silicone).

*Dow Corning* CE 8401 Emulsion delivers outstanding conditioning performance. It provides excellent wet and dry combing and outperforms traditional silicone benchmarks (refer to Charts 1 and 2). Additionally *Dow Corning* CE 8401 Emulsion delivers superior wet and dry sensory feel.

*Dow Corning* CE 8401 Emulsion provides color protection - reducing color loss of color treated hair. It also enhances hair body and wave in a rinse-off conditioner application. *Dow Corning* CE 8401 Emulsion provides curl retention in leave-on products.

## HOW TO USE

To optimize the dispersion of *Dow Corning* CE 8401 Emulsion into the final formulation it is recommended to add it slowly at the end of the procedure at a temperature below 40oC (104 oF) with continuous mixing.

Recommended use level is 2.0-10% for hair care formulations.

## **HANDLING PRECAUTIONS**

Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at [www.dowcorning.com](http://www.dowcorning.com). You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.

## **USABLE LIFE AND STORAGE**

When stored at or below 40°C (104°F) in the original unopened containers, this product has a usable life of 12 months from the date of production.

## **PACKAGING INFORMATION**

This product is available in 18kg packs and 200kg drums

Samples are available in 100g bottles.

## **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 Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com) or consult your local Dow Corning representative.

## **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

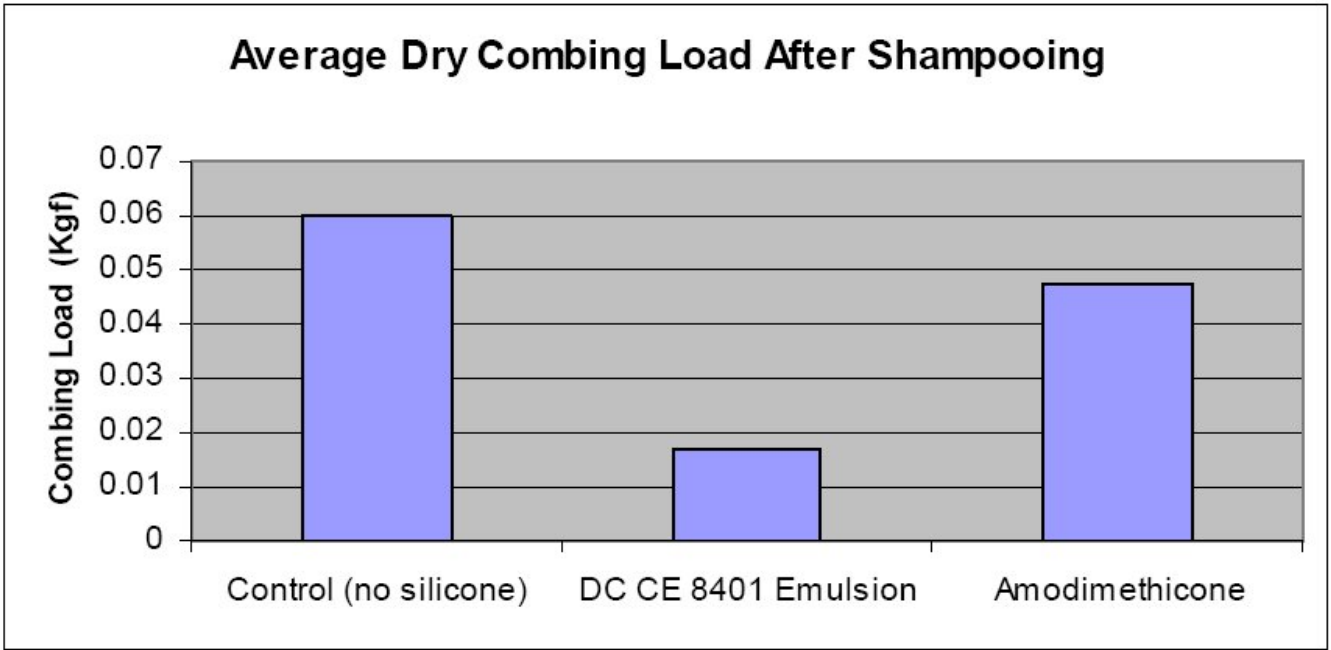
Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

## **DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

## **DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

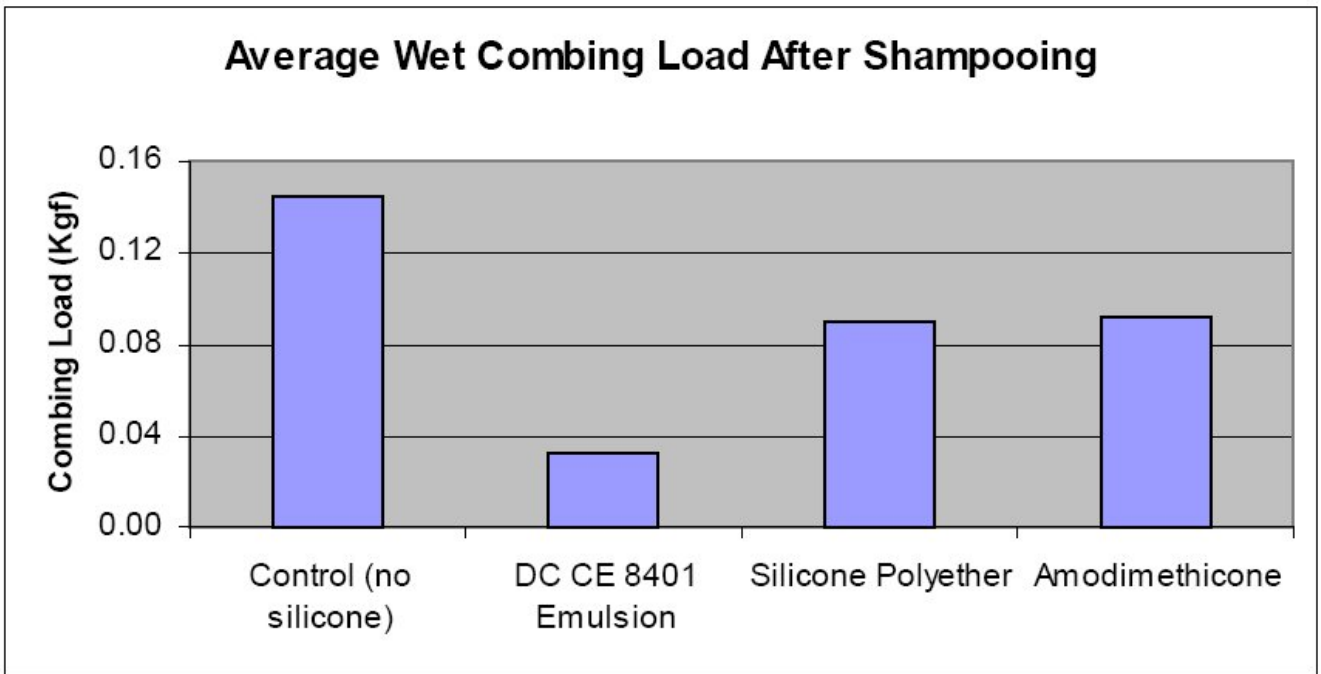
*We help you invent the future.™*

[www.dowcorning.com](http://www.dowcorning.com)



DC CE8401 is statistically different than control at 95% confidence limit and amodimethicone at 90% confidence limit. Slightly bleached Caucasian hair tresses, tresses were pulled using a tensile combing method, 2% active silicone

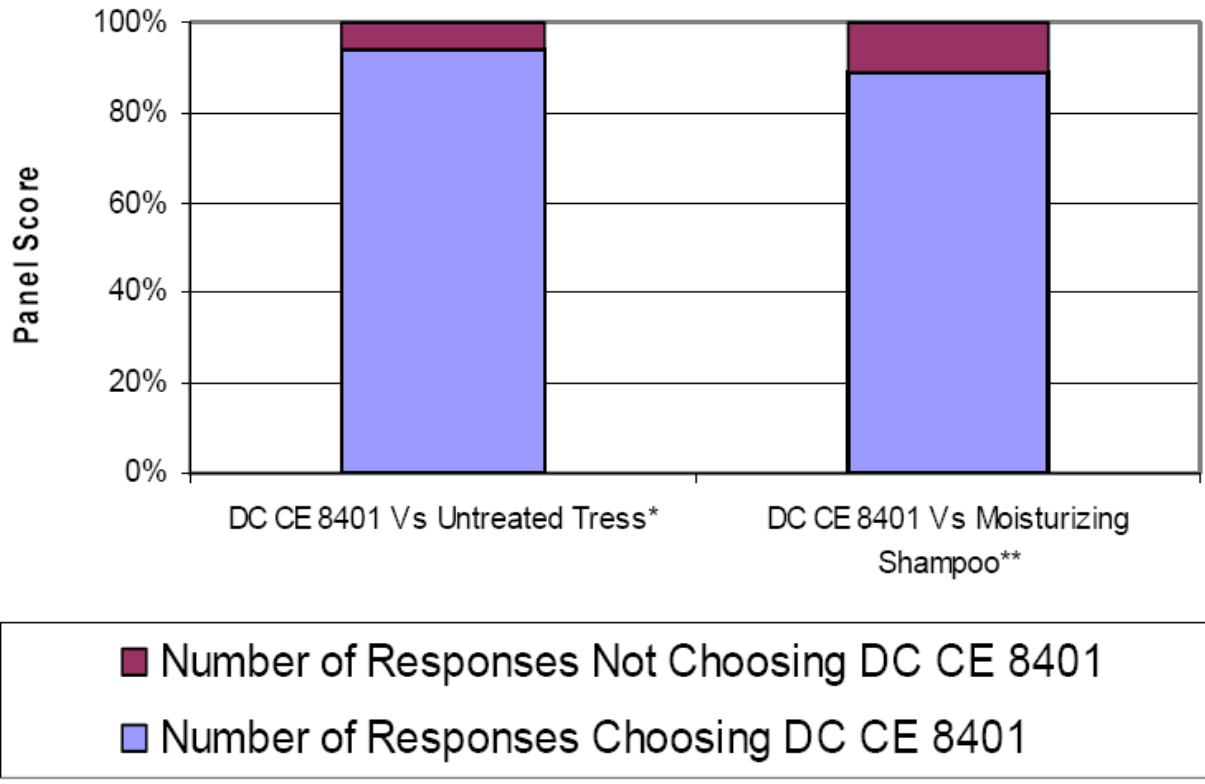
Chart 1: Average Dry Combing Load of *Dow Corning* CE 8401 Emulsion versus Amodimethicone.



DC CE 8401 Emulsion is statistically different than control, silicone polyether and amodimethicone at a 95% Confidence Level. Slightly bleached Caucasian hair tresses. Tresses were pulled using a tensile combing method, 2% active silicone.

Chart 2: Average Wet Combing Load of *Dow Corning* CE 8401 Emulsion versus Amodimethicone and Silicone Polyether.

### Wet Feel Slipperiness for Shampoo Containing DC CE 8401 Emulsion



**Panel Study, 18 panelists. Shampoo treatment, 2% active Si. \* 99.9% Confidence Level, One-Sided Directional Difference Test. \*\* 99% Confidence Level, Two-Sided Directional Difference Test** Wet feel/Slipperiness measures the presence or absence of resistance when moving the fingers down the hair between the thumb and forefinger

**Chart 3: Wet Feel/Slipperiness Attribute for Shampoo containing DC CE 8401 Emulsion.**