



Technical Data Sheet

DOWSIL™ CE-8411 Smooth Plus Emulsion

FEATURES

- Nonionic Emulsion
- Non-yellowing

BENEFITS

- Moisturizing feel with increased slipperiness, smoothness, and flexibility
- Superior conditioning
- Color protection
- Increased shine
- Effective deposition

COMPOSITION

- (AB)n Silicone Copolymer

INCI NAME: Bis-Diisopropanolamino-PG-propyl Dimethicone/Bis-Isobutyl PEG-14 Copolymer (and) Polysorbate 20 (and) Butyloctanol.

APPLICATIONS

- Rinse-off Conditioners
- Leave-in Conditioners
- Shampoos

TYPICAL PROPERTIES

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

Property	Unit	Value
Appearance		Milky White
Silicone level	%	~ 56
Emulsifier type		Nonionic

DESCRIPTION

DOWSIL™ CE-8411 Smooth Plus Emulsion is an (AB) n silicone copolymer which delivers effective deposition that provides a moisturizing feel, superior conditioning (Figure 1), and more.

In fully formulated hair care products, DOWSIL CE-8411 Smooth Plus Emulsion has shown superior conditioning on both wet and dry hair along with improved shine (Figure 2) and color protection.

Extensive panel testing conducted in both the salon and laboratory show DOWSIL CE-8411 Smooth Plus Emulsion provides increased smoothness, slipperiness, softness, volume, and flexibility to hair.

HOW TO USE

DOWSIL CE-8411 Smooth Plus Emulsion is a nonionic emulsion which is typically easy to incorporate

into conditioners and shampoos. It is recommended to add the emulsion at the end of production, at temperatures below 40°C (104°F) with continuous mixing.

Recommended use levels are 1–5% for hair care formulations.

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.

PACKAGING INFORMATION

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

Samples are available in 500 g 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 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.

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.

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.

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WARRANTY OF FITNESS FOR A
PARTICULAR PURPOSE OR
MERCHANTABILITY.**

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Figure 1: DOWSIL CE-8411 Smooth Plus Emulsion was tested against DOWSIL™ CE 8401 Emulsion in a series of half head tests in a rinse-off conditioner and shampoo, with the results below showing hair tested when dry. The benefits where DOWSIL CE-8411 outperformed DOWSIL CE 8401 at 95% confidence are circled.

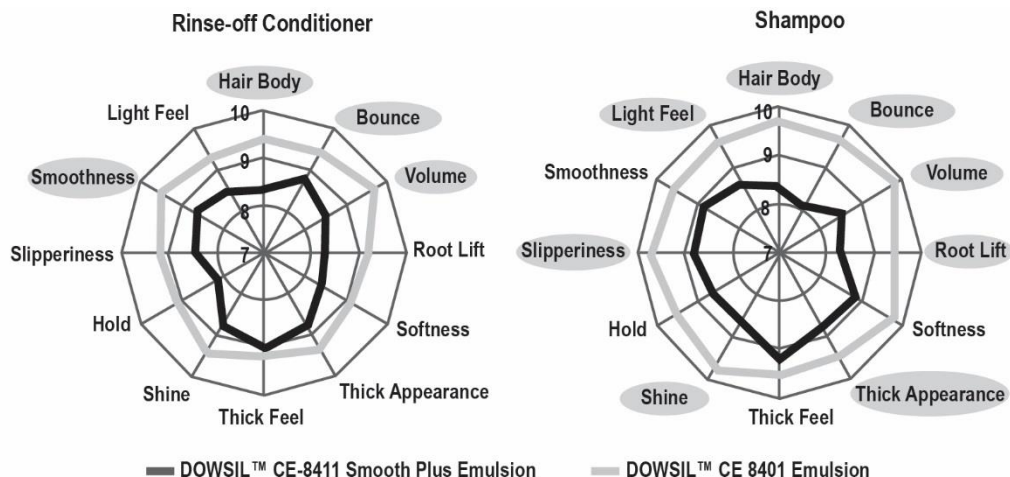
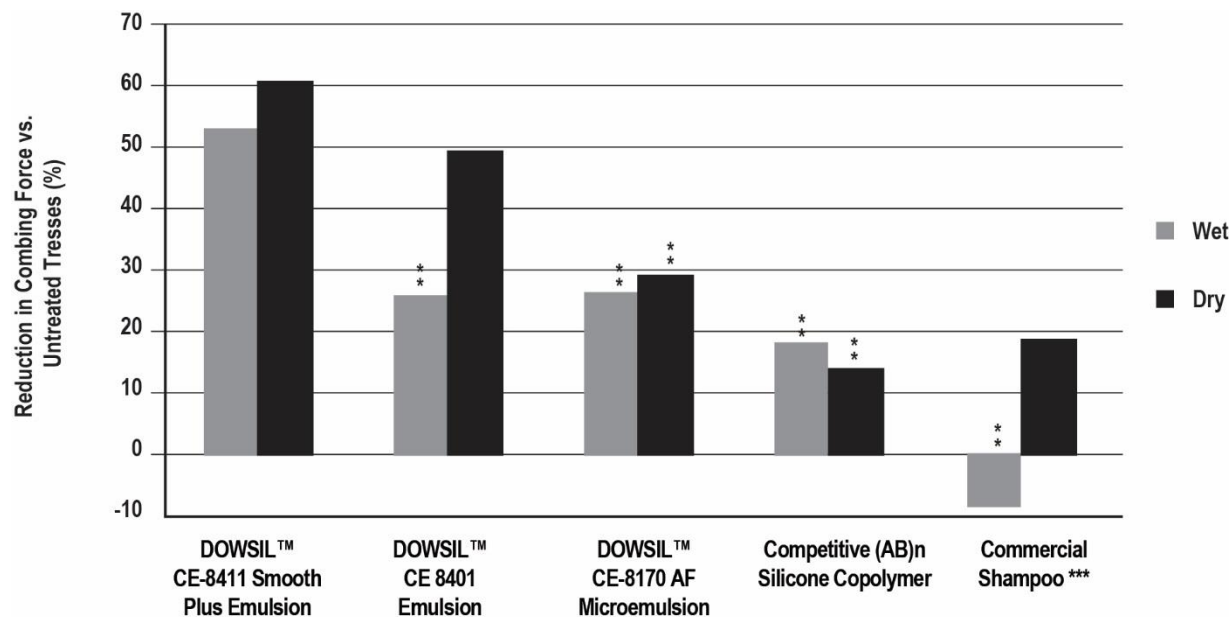


Figure 2: Dry and Wet combing results (Instron Instrument) for DOWSIL CE-8411 Smooth Plus Emulsion in a shampoo versus competitor material. DOWSIL CE-8411 Smooth Plus Emulsion performed similar to DOWSIL CE 8401 Emulsion for dry hair, but outperformed all other material at 95% confidence.



** ≥ 95.0% significant difference compared to DOWSIL CE-8411 Smooth Plus Emulsion

*** Contains silicone amino polyether

