Product Information

DOW CORNING

DOW CORNING® 2501 Cosmetic wax

FEATURES

- Easy formulation and application of aqueous formulations
- Humectant
- Melts on contact with skin

BENEFITS

- Moisturises
- Reduces tackiness
- Foam booster
- Increases foam density
- Non-comedogenic
- Non-acnegenic

INCI Name: Bis-PEG-18 Methyl Ether Dimethyl Silane

APPLICATIONS

- Skincare products: moisturisation benefits to the skin through humectancy properties.
- Detackification of formulation containing tacky ingredients such as deodorant sticks.
- Improves foam quality (creamier, more dense foam) and volume in cleanser and shampoo formulations.

TYPICAL PROPERTIES

Specification writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales representative prior to writing specifications on this product.

Parameter	Unit	Value
Colour (APHA), as liquid		250 max
Melt range	°C	28-34
Flash point	°C	>100
Appearance		White to slightly yellow

DESCRIPTION

DOW CORNING 2501 Cosmetic Wax is a water dispersible silicone glycol copolymer wax. It has a low melting point.

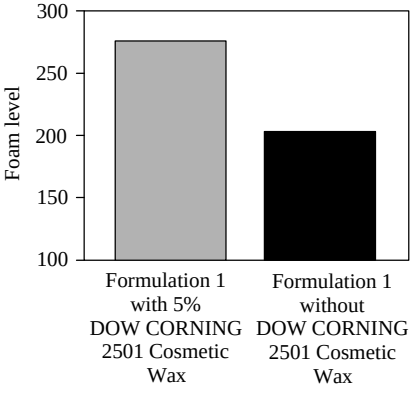
HOW TO USE

DOW CORNING 2501 Cosmetic Wax is easy to formulate into aqueous systems. It is best to melt the material prior to use in the formulation.

FOAMING PROPERTIES

DOW CORNING 2501 Cosmetic Wax has been shown to boost foaming of surfactant systems. A foam test of a mild facial cleanser with and without DOW CORNING 2501 Cosmetic Wax was conducted using a modified Ross Miles foam volume test. A 500ml graduated cylinder was fitted with a Waring blender agitator, 50ml of a 5% solution of the test facial cleanser was added to the graduate and mixed at high speed for 10 seconds. The resultant foam height was measured.

Figure 1: Ross Miles foam volume test.



This represents a 40% increase in foam volume!

The facial cleanser listed in the Formulation Sheet (Ref.no. 22-1520-01) with and without this product was tested in a 14 person, two week, take-home panel (1 week per product). Results (Figure 2) showed the formula containing DOW CORNING 2501 Cosmetic Wax to be better than the control for ease of foaming, more dense foam and better foam feel.

IMPACT ON FORMULATIONS

DOW CORNING 2501 Cosmetic Wax detackifies common cosmetic components and modifies the aesthetic properties of others. Sensory evaluation by 20 expert panelists were made on various cosmetic ingredients with and without DOW CORNING 2501 Cosmetic Wax.

Figures 3 to 8 show the modified aesthetic properties when DOW CORNING 2501 Cosmetic Wax is added at a 1:3 ratio to other cosmetic ingredients. Other sensory profiles may be obtained at different ratios of ingredients and in other formulations.

SENSORY EVALUATION PROFILE

A sensory profile has been developed on DOW CORNING 2501 Cosmetic Wax to aid you in your formulation effort. Figure 9 can direct you to the aesthetics you desire for your formulation.

The Dow Corning Sensory Evaluation Programme follows the guidelines recommended by the ASTM Committee E18.03.01 on Sensory Evaluation.

The programme utilises a 20 member trained panel to evaluate the skin feel properties of raw materials as well as formulated products using a description analysis method that quantifies several sensory attributes.

HANDLING PRECAUTIONS

DOW CORNING 2501 Cosmetic Wax is stable at both low and high temperatures in an inert environment. Under certain conditions in aqueous formulations, DOW CORNING 2501 Cosmetic Wax hydrolyses into a mixture of silanol functional moiety and an organic polyether.

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 SAFETY DATA SHEET IS AVAILABLE FROM YOUR LOCAL DOW CORNING SALES REPRESENTATIVE.

USABLE LIFE AND STORAGE

When stored at or below 25°C in the original unopened containers, this product has a usable life of 12 months from the date of production.

PACKAGING

This product is available in 15.8kg pails and 159kg drums.

Samples are available in 454g packs.

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 Health, Environment and Regulatory Affairs specialists available in each area.

For further information, please consult your local Dow Corning representative.

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 Dow Corning's products are safe, effective, and fully satisfactory for the intended end use. Dow Corning's sole warranty is that the product will meet the Dow Corning 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. Unless Dow Corning provides you with a specific, duly signed endorsement of fitness for use, Dow Corning disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.

COMPATIBILITY

Type of material	
Water	C
Ethyl alcohol	C
Propylene glycol	C
Cyclomethicone	I
Dimethicone	I
Isopropyl myristate	I
Stearyl alcohol	I

C = Compatible at all ratios, I = Incompatible at all ratios

Figure 2: SENSORY EVALUATION - Facial cleanser.

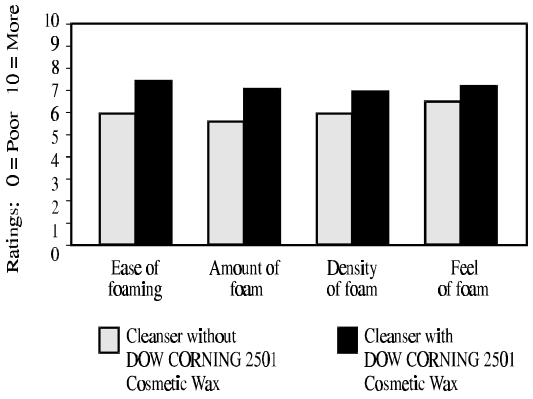


Figure 3: TACKINESS - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

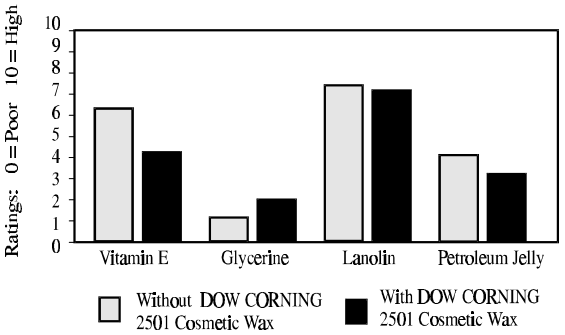


Figure 4: WAXINESS - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

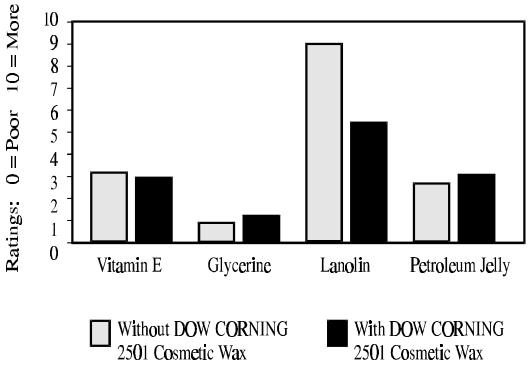


Figure 5: LOTION STICKINESS - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

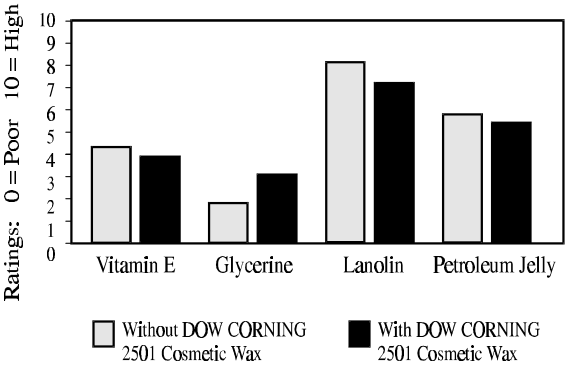


Figure 6: SPREADABILITY - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

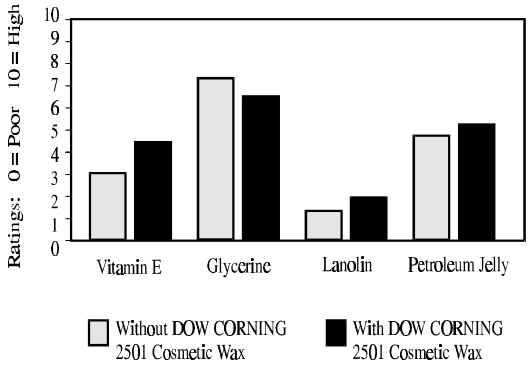


Figure 7: SLIPPERINESS - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

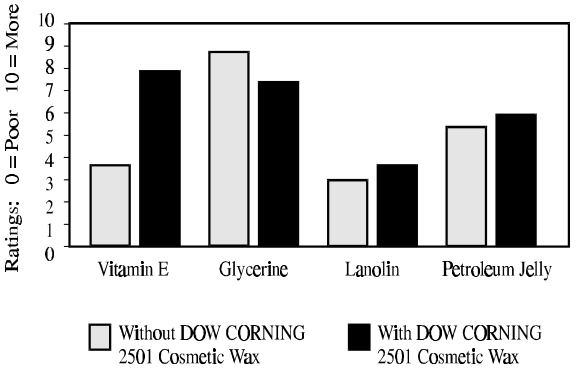


Figure 8: GREASINESS - 1 part DOW CORNING 2501 Cosmetic Wax to 3 parts test material.

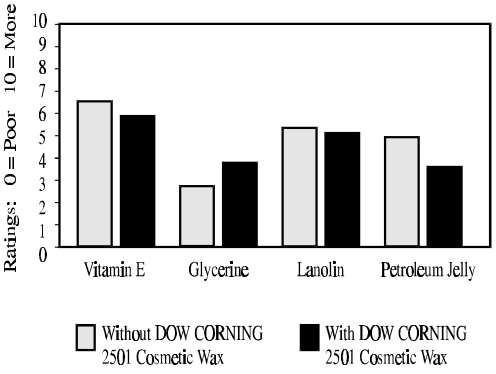


Figure 9: Sensory Evaluation Profile of DOW CORNING 2501 Cosmetic Wax.

Observations		0 1 2 3 4 5 6 7 8 9 10	
Lotion Stickiness	Not sticky	Baby oil 0.5 Lanolin	Sticky
Wetness	Dry	Baby powder 4.9 Water	Wet
Spreadability	Hard	Lanolin 6.5 Baby oil	Easy
Absorbency	Low	Lanolin 2.2 Protein	High
Gloss	Dull	Denture adhesive 8.6 Baby oil	Shiny
Slipperiness	Draggy	Lanolin 7.1 Baby oil	Slippery
Residue	No residue	Untreated skin 7.5 Zinc oxide ointment	Lot of residue
Smoothness	Rough	Denture adhesive 7.7 Glass	Smooth
Tackiness	Not tacky	Untreated skin 2.1 Lanolin	Very tacky
Oiliness	Not oily	Untreated skin 2.8 Baby oil	Very oily
Greasiness	Not greasy	Untreated skin 3.0 Petroleum jelly	Very greasy
Waxiness	Not waxy	Untreated skin 2.7 Lanolin	Very waxy