

#### **Technical Data Sheet**

### **DOWSIL™ SW-8005 C30 Resin Wax**

INCI Name: C30-45 Alkyldimethylsilyl Polypropylsilsesquioxane

# Features & Benefits

- High melting point wax (66°C)
- Semi-occlusive material
- Rheology and texture modifier
- Structuring agent
- Broad compatibility with organic and silicone materials
- Good compatibility with fragrances
- Increases non transfer property in lipsticks
- Improves coverage, color uniformity and intensity in color cosmetic applications

### Composition

• 100% wax

### **Applications**

- Rheology and texture modifier in oil-in-water and water-in-oil emulsions and also anhydrous gels.
- Structuring agent for sticks, especially lipsticks.
- Can be used in a wide range of cosmetic products such as color cosmetics, skin care, sun care and hair care.

### **Typical Properties**

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

Property	Unit	Result
Appearance		White to off-white large flakes
Odor		Characteristic odor
Specific gravity		0.8
Flash point (Closed cup)	°C	> 100
Melting point	°C	66
Cyclotetrasiloxane (D4) content	%	< 0.1
Cyclopentasiloxane (D5) content	%	< 0.1

# **Description**

DOWSIL™ SW-8005 C30 Resin Wax is a 66°C melting point silicone resin wax. It combines the physical and chemical characteristics of silicone wax with silicone resin such as improved non transfer.

#### How to Use

Melt the DOWSIL™ SW-8005 C30 Resin Wax with the other oil phase components. In the case of emulsion products, ensure that the wax is completely melted into the oil phase by heating it to 75°C.

Ensure that the temperature of the aqueous phase is also 75°C before adding it to the oil phase. Avoid any dramatic decrease in temperature; allow it to cool down at a slow, consistent rate until 40°C has been reached with good mixing to keep system uniform. The recommended levels are dependent on the application but can be as low as 2% for structuring an emulsion and as high as 20% for a lipstick.

# Figure 1: Chemical structure of DOWSIL™ SW-8005 C30 Resin Wax

[CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>SiO<sub>3/2</sub>]<sub>x</sub>[R(CH<sub>3</sub>)<sub>2</sub>SiO<sub>1/2</sub>]<sub>v</sub>

where R is  $-(CH2)_nCH_3$ where n = 30 - 45

# 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

No special storage measures are required. When stored at or below 32°C in the original unopened container, the product has a usable life of 720 days.

# Packaging Information

This product is available in 20 kg boxes.

Samples are available in 1 quart tubs (~ 1 liter).

#### 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.

### Compatibility

Wt% of DOWSIL™ SW-8005 C30 Resin Wax	10	5	90	
Material	NC	NC	NC	
Ethanol	С	С	С	
Beeswax	С	С	С	
Ozokerite Wax	С	С	С	
Candellilla Wax	С	С	С	
C12-15 Alkyl Benzoate	С	С	С	
Caprilic / Capric Triglyceride	С	С	С	
Octyl Dodecanol	С	С	С	
Ethylhexylmethoxy Cinnamate	С	С	С	
Sunflower oil	С	С	С	
Castor oil	С	С	С	
Low molecular weight, volatile silicone oils	С	С	С	
Isododecane	С	С	С	

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