

Lotioncrafter

532 Point Lawrence Rd.

Olga, WA 98279

Tel: 360-376-8008 www.lotioncrafter.com

POLAWAX NF

INCI: Emulsifying Wax NF

THE FOLLOWING IS EXCERPTED FROM CRODA'S TECHNICAL DATA ON POLAWAX:

POLAWAX sets the standard for self emulsifying waxes monographed in the National Formulary. It is the premier nonionic self-emulsifying wax used in the cosmetic and pharmaceutical industries. It is a mild ingredient with a proven safety record and has been used successfully for many years.

CHEMICAL/PHYSICAL PROPERTIES

Polawax is a preparation of higher fatty alcohols and represents an emulsifier of the self-bodying type.

Polawax produces thick, solid emulsions without the addition of stiffening waxes, even at concentrations as low as 5%, although 10% may provide superior stability. **Polawax** emulsions show excellent stability in both acid and base media. Stable emulsions with a pH as low as 3 or as high as 13 can be produced. **Polawax** is compatible with anionic, cationic and nonionic systems, making it a truly versatile product.

Polawax does not deteriorate on heating, experiencing only a slight alteration in color at temperatures up to 150-152°C for two hours. Under these severe conditions, it may lose 2-3% in weight with slight hardening of the wax.

FUNCTIONS

Polawax can be used to produce viscous or thin emulsions, depending upon the concentration at which it is used. At low concentrations of 2-3%, **Polawax** provided optimum emulsion stability supplemented with other emulsifiers.

RECOMMENDED USE LEVELS 2.0% - 10%

FORMULATING WITH POLAWAX

Polawax emulsions can be prepared easily by incorporating **Polawax** in the oil phase and then heating it and the water phase separately to 70°-80°C, once the two phases reach this temperature, the water phase is added to the oil phase in a thin stream using mechanical agitation. The emulsion is then stirred down to a temperature above the solidification point of the cream (to 30°C for a lotion). These emulsions are very stable, easy spreading systems, but can be homogenized if desired. A preservative should always be added to protect against bacterial growth.

TYPICAL PROPERTIES

Appearance	Pastille
Color	Creamy White
Odor	Mild, characteristic
pH (0.3% water dispersion)	5.5 - 7.0
Melting point	48-52°C (with decomposition)
Saponification Value	14.0 Max.
Hydroxyl Value	178-192
Iodine Value	3.5 Max
Fatty Alcohol Assay	Proprietary

END OF EXCERPTED INFORMATION FROM CRODA TECHNICAL DATA

STORAGE

Polawax should be stored in a tightly closed container in a cool, dry place. Storage above 90°F may result in coagulation.

LIMITATIONS

This product is neither tested nor represented suitable for medical or pharmaceutical uses.

LIMITED WARRANTY – PLEASE READ CAREFULLY

The information contained herein is offered in good faith based on Lotioncrafter's research and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information shall not be used in substitution for customers' tests to insure that Lotioncrafter's products are fully satisfactory for your specific applications. Our warranty is that the product will meet its current sales specifications. 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.