

DEDRAFLOW®



- EMOLLIENT
- LUBRICANT
- MOISTURE BARRIER

DEDRAFLOWS are photostable, ultra soft emollients with a wide range of sensorial perceptions. **DEDRAFLOW®** products are Hydrogenated Polyisobutenes or mixtures of Hydrogenated Polyisobutenes and Silicone Oils. They vary from very volatile grades without residue to extremely viscous grades with substantial residue.

Trade Name	INCI Name	Viscosity	Feel	Residue
Dedraflow® 5	Hydrogenated Polyisobutene	3-8 mPa.s	Light	None, volatile
Dedraflow® 5 HR	Hydrogenated Polyisobutene (and) Hydrogenated Polydecene	3-8 mPa.s	Light	None, volatile
Dedraflow® 6	Hydrogenated Polyisobutene (and) Hydrogenated Polydecene	8-12 mPa.s	Light	None
Dedraflow® 30	Hydrogenated Polyisobutene	4-8 mPa.s	Light	None
Dedraflow® 50	Hydrogenated Polyisobutene	12-18 mPa.s	Silky	Slight
Dedraflow® DIM	Hydrogenated Polydecene (and) Polybutene	120-190 mPa.s	Silky	Silky, slight

Benefits

- ✔ Improved photostability of the formulation
- ✔ Soft feel varying from very light to extremely rich
- ✔ Excellent spreadability
- ✔ Shine and glossiness
- ✔ Pure and hypoallergenic

Properties

- ✔ Colourless, odourless and tasteless
- ✔ Photostable and inert
- ✔ Compatible with most cosmetic ingredients



Application Areas

Skin Care

DEDRAFLOWS are ideal base materials for day care products since they are photostable, and hence prevent the UV-light induced formation of free radicals in the formulation. As they are emollients, they are suitable for all kinds of skin care preparations. Depending on their viscosity, they modify the texture of formulations accordingly. The low viscosity products are volatile and therefore they leave no residue or only a light residue. The high viscosity products leave a substantial residue.

Sun Care

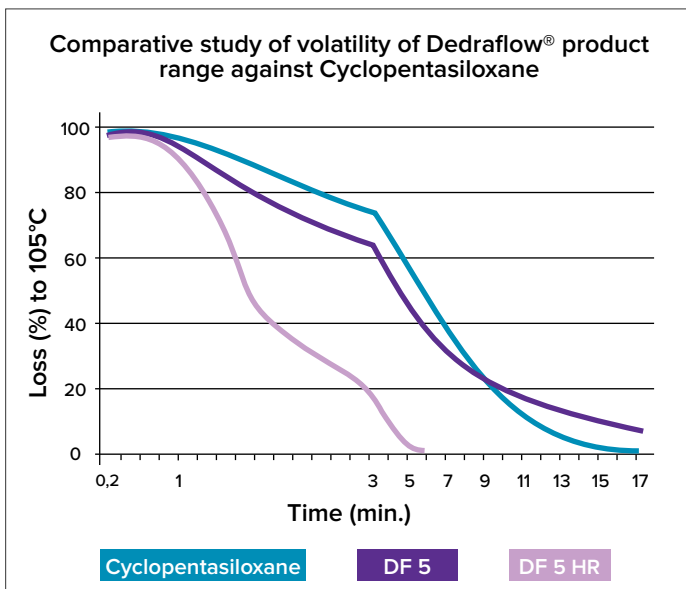
DEDRAFLOWS are excellent emollients for sun care products, as they are completely photostable. As **DEDRAFLOWS** are texture modifiers, they bring softness and elegance to sun care formulations. **DEDRAFLOWS** are compatible with all types of UV-filters.

Colour Care

DEDRAFLOWS are suitable for all types of colour care applications in which emolliency and softness is desired. They can also be used as binders in powder applications. The low volatility **DEDRAFLOWS** are excellent ingredients for non-transfer formulations. The non-volatile **DEDRAFLOWS** are suitable for formulations in which a film formation against moisture loss is desired.

Hair Care

DEDRAFLOWS can be used as emollients in hair care products. They have a detangling effect while bringing softness and shine.



Formulating

Emulsions

DEDRAFLOWS are suitable for all types of emulsions. All of them can be used in cold process formulations and **DEDRAFLOW® 30** and **50** are also suitable for hot process formulations. **DEDRAFLOW®** is volatile and therefore it should not be heated. **DEDRAFLOW® 30** and **50** can be added into the oil phase before emulsification as they are not heat sensitive.

TYPICAL USE LEVEL: 5-10%.

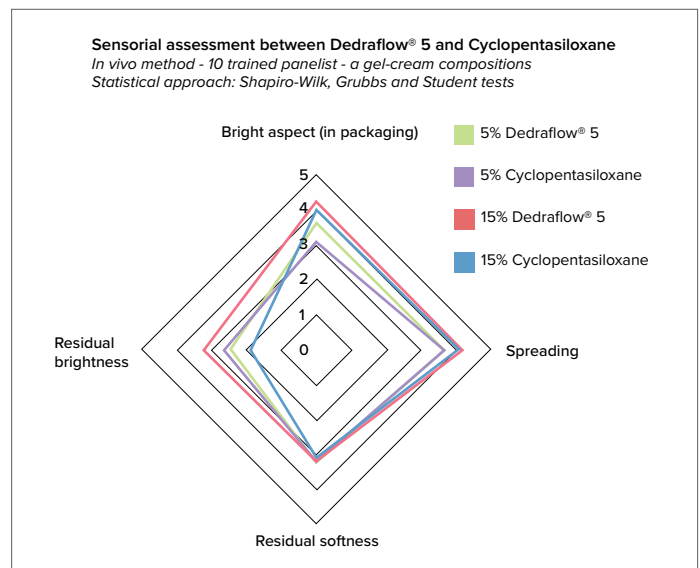
Anhydrous Systems

DEDRAFLOWS can be added into anhydrous systems without heating. However, if heating is required, **DEDRAFLOW® 5** should be avoided as it is volatile.

TYPICAL USE LEVEL: 5-10%.

Packaging

25kg jerry can and 160kg metal drum.



This study shows the following conclusions for gel-cream compositions:

- The sample with 15% of Dedraflow® 5 is significantly the brightest (residual) compared to the others (t-test, $P < 0,05$)
- The panelists do not succeed to make a difference between the 4 samples in terms of residual softness (t-test, $P > 0,05$)
- The samples with Dedraflow® 5 are significantly brighter (in packaging) than samples with Cyclopentasiloxanes (t-test, $P < 0,05$)
- In terms of spreading, samples with 5% of Dedraflow® 5 and Cyclopentasiloxane are comparable (t-test, $P > 0,05$). We notice the same result with 15% of each emollient

Since the panelists failed to make a difference between the samples with Dedraflow® 5 vs. Cyclopentasiloxane in terms of spreading, we can confirm that Dedraflow® 5 is an essential Cyclopentasiloxane substitute.

Besides avoiding environmental concerns, Dedraflow® 5 increases the brightness of compositions and gives the same spreading and residual softness.