

emollient, lubricant, moisture barrier

Application Sheet

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.

Dedraflow® 5 has the lowest viscosity and the highest volatility, while Dedraflow® 5000 has the highest viscosity and it is the least volatile of all the Dedraflows®. Dedraflow® 5.X has been designed to replace Cyclomethicone in formulations. They have the same skin feel as Cyclomethicone and the volatility profile is very similar. Dedraflow® 5.X can be used to replace Cyclomethicone without any further modifications in the formulation while delivering the same feel and performance as before.

Trade Name	INCI Name
Dedraflow® 5	Hydrogenated Polyisobutene
Dedraflow® 5.1	Hydrogenated Polyisobutene (and) Hydrogenated Polydecene (and) Hydrogenated C6-14 Olefin Polymers
Dedraflow® 5.2	Hydrogenated Polyisobutene (and) Hydrogenated C15-19 Alkane (and) Hydrogenated C6-14 Olefin Polymers
Dedraflow® 5.3	Hydrogenated Polyisobutene (and) Dimethicone
Dedraflow® 10	Hydrogenated Polyisobutene (and) Dimethicone
Dedraflow® 30	Hydrogenated Polyisobutene
Dedraflow® 50	Hydrogenated Polyisobutene
Dedraflow® 325	Hydrogenated Polyisobutene (and) Dimethicone
Dedraflow® 2800	Hydrogenated Polyisobutene (and) Dimethicone
Dedraflow® 5000	Hydrogenated Polyisobutene (and) Dimethicone

cyclomethicone
replacements

Trade Name	Viscosity	Feel	Residue
Dedraflow® 5	3-8 mPa.s	Light	None, volatile
Dedraflow® 5.1	3-8 mPa.s	Light	None, volatile
Dedraflow® 5.2	3-8 mPa.s	Light	None, volatile
Dedraflow® 5.3	3-8 mPa.s	Light	None, volatile
Dedraflow® 10	3-6 mPa.s	Light	None
Dedraflow® 30	4-8 mPa.s	Light	None
Dedraflow® 50	12-18 mPa.s	Silky	Slight
Dedraflow® 325	310-450 mPa.s	Slippery	Slight, silky
Dedraflow® 2800	2500-3500 mPa.s	Smooth	Moderate, velvety
Dedraflow® 5000	5000-7000 mPa.s	Rich	Significant, rich

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® 5, 5.1, 5.2, 5.3 and 10 are volatile and therefore they should not be heated. Dedraflow® 30 and 50 can be added into the oil phase before emulsification as they are not heat sensitive. Dedraflow® 325, 2800 and 5000 have to be added into the emulsions after emulsification, below 50°C as otherwise the emulsion structure may break.

Typical use level: 5-10%

Anhydrous Systems

Dedraflows® can be added into anhydrous systems without heating. However, if heating is required, Dedraflow® 5, 5.1, 5.2, 5.3 and 10 should be avoided as they are volatile and Dedraflow® 325, 2800 and 5000 should also be avoided, as they are heat sensitive.

Typical use level: 5-10%

Packaging: 25kg jerry can and 160kg metal drum