

Plantasens® Flash
**NEW FEATHERY
GREEN EMOLLIENTS
THAT FLY HIGH
ABOVE THE REST**



what is precious to you?

Plantasens® Flash

A NATURAL SILICONE SUBSTITUTE

With Plantasens® Flash, Clariant introduces a new technology for making cosmetic ingredients that enables the creation of extraordinary textures from natural materials. The first products we provide with this groundbreaking method are two powerful alternatives to light emollients like D5 and isoheptadecane that make light work of satisfying green beauty trends.

Clariant has the ambition of being a sustainable game changer in the field of natural cosmetics, and the Green Performers of our Naturals platform are specifically designed to provide high-performing green alternatives to incumbent ingredients.

With Plantasens® Flash 80 and 100, a duo of plant-derived emollients, we offer two excellent alternatives to highly scrutinized D5 silicones that perfectly match their profile. They also stand out from similar emollient replacements in other important respects.

What makes our Plantasens® Flash emollients so special?

VERSATILITY



Effectively replacing silicones requires a wide range of products geared to specific applications. Our natural emollients are just the first two products of a whole new portfolio that is constantly expanded and refined.

METATHESIS



This new technology allows us to make plant-based alkanes through a simpler pathway at low pressures and temperatures. The result is a much better eco-footprint than possible with classical methods.

COST EFFICIENCY



Replacing established fossil-based ingredients with efficient alternatives can be expensive. We offer a platform of plant-based emollients that combine high performance with cost efficiency.



BEST-IN-CLASS GREEN INGREDIENTS



EXCELLENT PERFORMANCE



BIO-BASED, RENEWABLE



BIODEGRADABLE



ISO 16128-COMPLIANT



FEATHERY FEEL

Technical data and applications

PLANTASENS® FLASH 80



**SHORT
PLAYTIME**

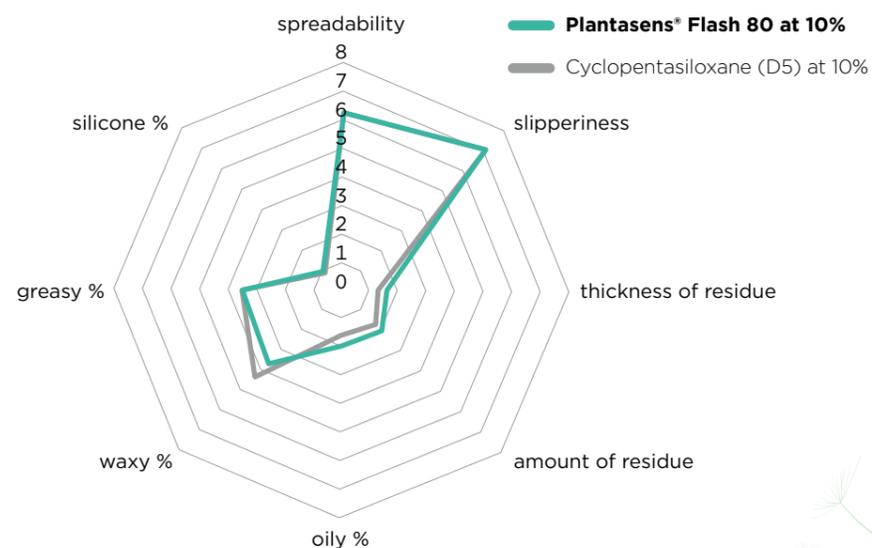
INCI: Dodecane

Viscosity at 40 °C: 1.3-1.7 cSt
Flashpoint: 65-85 °C
Surface tension: 24.9 mN/m, 20 °C
Spreadability: 1330 mm², 10 min
Refractive index: 1.420, 20 °C

Plantasens® Flash 80 is a lightweight emollient characterized by fast spreading and a fabulous satiny after feel. Being natural, it represents a perfect alternative to light emollients like D5 and a powerful aid for responding to the market's call for weightless textures and comforting sensory profiles.

Skin care products formulated with Plantasens® Flash 80 provide short playtime, a luminous but not glossy film and a delightful finish. In deodorants and make-up, but also in hair care products such as leave-in conditioners, it combines superlight feel with ultrafast spreading and absorption and minimal oiliness.

SENSORY PROFILE



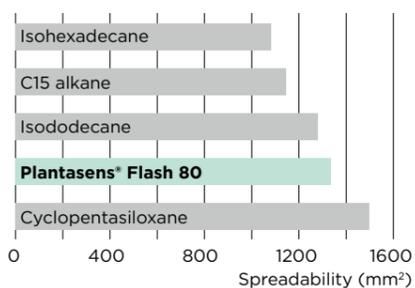
APPLICATIONS

- Transparent micellar shampoo
- Liquid crystal – double ends
- Deodorants: stick, roll-on
- Disciplinating shampoo
- Straightening conditioner

BENEFITS

- Fast absorption in deodorants
- Superlight after feel in cleansing liquids
- Perfect delivery of double-ends functional ingredients
- Better sensory, shine and volume in shampoos

SPREADABILITY IN SKIN SURROGATE DIFFUSION TESTS



Skin care

FAST-SPREADING, INSTANTLY ABSORBED SOFTNESS FOR DEODORANTS AND CLEANSERS

Plantasens® Flash 80 exhibits exactly the high-speed spreading and instantaneous absorption that roll-on and stick deodorants need to keep up with their users' busy lives. It perfectly matches the feel and spreadability of cyclopentasiloxane (D5) in skin care applications, providing a volatile texture, non-oily luminosity and soft finish. It also imparts a superlight after feel to cleansing liquids and facilitates the delivery of double-purpose functional ingredients.

PRODUCT EXAMPLE: CARE AND CONTROL NATURAL DEODORANT

PHASE	INGREDIENT	INCI NAME	% W/W
A	CareMag™ D	Magnesium Hydroxide (and) Magnesium Carbonate Hydroxide	20
	Tocopheryl Acetate	Tocopheryl Acetate	2
	Tapioca Natural 9096	Tapioca Starch	10
	Corn PO4 PH »B« 9042	Distarch Phosphate	10
	Lavender Oil	Lavandula Angustifolia (Lavender) Oil	0.5
B	Plantasens® Flash 80	Dodecane	15
	Plantasens® Refined Babassu Butter	Orbignya Oleifera (Babassu) Seed Oil	5
	Joboba Oil	Simmondsia Chinensis (Jojoba) Seed Oil	3
	Myritol 318	Caprylic/Capric Triglyceride	4.5
	Plantasens® Cosmetic Wax A4	Hydrogenated Vegetable Oil	5
	Kahlwax 6202	Ozokerite	15
Lanette O	Cetearyl Alcohol	10	

Hair care

EVEN EASIER WET AND DRY COMBING THAN WITH SILICONES

In shampoos, Plantasens® Flash 80 efficiently enhances feel, shine and volume and improves dry and wet combing properties even more than amodimethicone, dimethicone and D5. The emollient also enhances both types of combing with a longer-lasting effect than silicones when used in conditioners, and is likewise superior to the plant-based C13-15 alkanes of Plantasens® Flash 100 in this respect. In leave-in formulations, Plantasens® Flash 80 outperforms silicones in dry-combing tests.

PRODUCT EXAMPLE: VOLATILE ELIXIR - LIQUID CRYSTAL HAIR CARE

PHASE	INGREDIENT	INCI NAME	% W/W
A	Plantasens® Flash 80	Dodecane	98,9
	Plantasens® Abyssinian Oil	Crambe Abyssinica Seed Oil	1
	Fragrance »Oridee«	Fragrance	0.1



Technical data and applications

PLANTASENS® FLASH 100



**MEDIUM
TO LONG
PLAYTIME**

INCI: Tridecane and Pentadecane

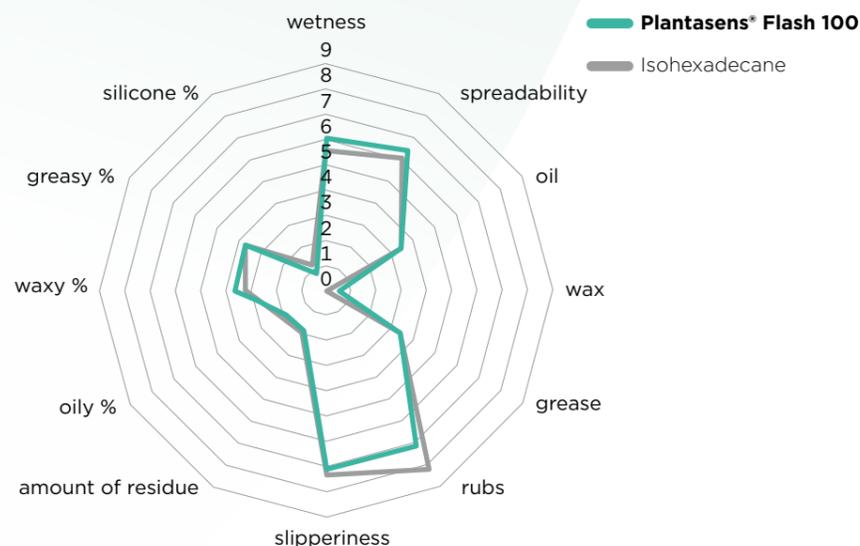
Viscosity at 40 °C: 2.1-2.7 cSt

Flashpoint: 90-107 °C

Plantasens® Flash 100 is a lightweight emollient that spreads fast and has a smooth and cozy after feel. It offers a natural alternative to light cosmetic emollients like D5 and isohexadecane and enables a powerful response to consumer demand for airy textures and cushy sensory impressions.

Skin care products formulated with Plantasens® Flash 100 provide medium to long playtime, a film that is luminous without being glossy and a highly enjoyable finish. The emollient is an ideal candidate for formulations designed for longer spreading times and superlight and slim textures, for instance in make-up and sun and body care, but also in shampoos and masks. Plantasens® Flash 100 is excellently suited for products for dry and sensitive skin and promotes efficient delivery of pigments.

SENSORY PROFILE



Hair care

SUPER SUPPLE SOFTNESS AND MORE SHINE THAN ACHIEVED WITH SILICONES

Like Plantasens® Flash 80, Flash 100 leads to better wet and dry combing than silicones when used in shampoos and provides longer-lasting conditioning effects in conditioners. The plant-based alkane emollient also imparts exquisite softness to the hair and even more shine than achieved with silicones.

Plantasens® Flash 100 makes an excellent addition to hair care products formulated for sensory pleasantness and improved shine and volume.

Skin care

MEDIUM PLAYTIME REWARDED WITH A DOWNY FEEL AND DEWY LOOK

Plantasens® Flash 100 imparts a highly attractive combination of volatility, prolonged playtime, smooth skin feel, pleasant texture and soft finish to skin care products. It serves as an ideal replacement for fossil-based isohexadecane in face care and make-up applications, and the increased need for rubbing is a great advantage in both face care and body and sun care products. Plantasens® Flash 100 leaves a more pleasurable skin feel than D5 and isohexadecane and has a smooth and extremely enjoyable sensory profile.

APPLICATIONS

- Smoothing body lotions and mousses
- Face creams for a dewy look
- Light sunscreen textures
- High SPF protection
- Foundation liquids
- Lipstick formulations
- Detangling lotions
- Smoothing masks
- Antiperspirants, deodorants

BENEFITS

- Smoothness in body lotions, mousses and deodorants
- Radiant and luminous coverage in foundations
- Uniform delivery of inorganic pigments and sun filters
- Improved color intensity and homogeneous coverage in make-up formulations



PRODUCT EXAMPLE: »PROTECT AND BEAUTIFY« SUN CARE OIL AV/3600

Covers the skin with a light layer of caring, non-greasy water-resistant beach oil with UVA/UVB protection

PHASE	INGREDIENT	PRODUCT TYPE	
	Tegosoft TN (C12-15 Alkyl Benzoate)	Emollient	ad 100 %
	Plantasens® Carefeel Light (Clariant) (Ethylexyl Olivat)	Emollient	15.0 %
	Plantasens® Flash 100 (Clariant)	Emollient	13.0 %
A	Eclipsogen® AVB (Clariant) (Butyl Methoxydibenzoylmethane)	UV filter	5.0 %
	Eclipsogen® OCR (Clariant) (Octocrylene)	UV filter	7.0 %
	Eclipsogen® Sorb S (Clariant) (Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine)	UV filter	2.0 %
	Eclipsogen® EHMC (Clariant) (Ethylhexylmethoxycinnamate)	UV filter	7.0 %
	Plantasens® Abyssinian Oil (Clariant) (Crambe Abyssinica Seed Oil)	Emollient	2.0 %
B	Tocopheryl Acetate	Antioxidant	0.5 %
	Plantasens® Olive Active HP (Clariant) (Olea Europaea (Olive) Oil Unsaponifiables)	Active	2.0 %
	Fragrance »Kirschblüte«	Fragrance	0.3 %





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