



BotaniDesign™ 105

Ultra-rich, glossy, biodegradable jelly emollient



**DERIVED NATURAL
ACCORDING TO
ISO 16128¹**



**READILY
BIODEGRADABLE²**



VEGAN SUITABLE³

CARGILL SUSTAINABILITY SCORE



Origin:

- INCI: Hydrogenated Vegetable Glycerides
- BotaniDesign™ 105 is an ultra-rich, readily biodegradable vegetable-based emollient developed as a drop-in replacement for emulsion formulations. Derived natural, with a smooth nourishing skin-feel, BotaniDesign™ 105 is the ideal alternative to petrolatum for bringing richness to formulations and providing enhanced skin care and hair care benefits.

Benefits:

- Supports skin barrier health
- Highly occlusive for TEWL reduction
- Enhanced moisturization
- Offers ability to create microemulsions
- Adds shine to lip products
- Adds body to formulations
- Non-Comedogenic

Technical data:

- Appearance: White to off-white semi-solid (25°C)
- Drop point (typical): 50°C
- Shelf life: 2 years

Uniqueness:

BotaniDesign™ 105 is a complex composite created through the esterification of botanical derivatives

One-pot process:

- Esterification reaction
- 100% output capture
- Solvent-free reaction

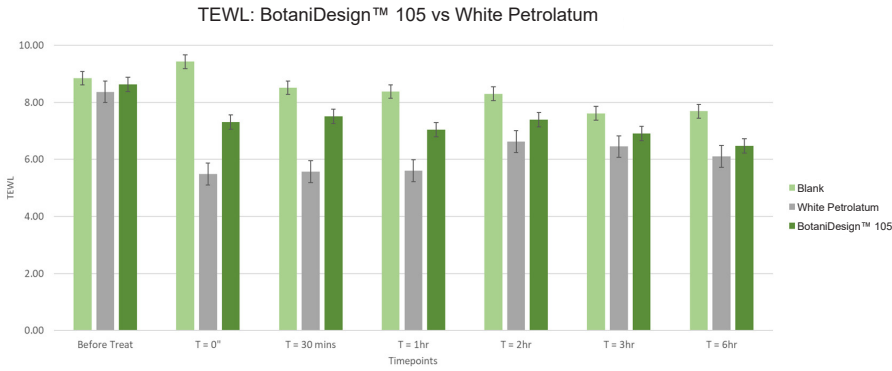
Applications



High performance in skincare benefits:

Trans-epidermal water loss (TEWL)

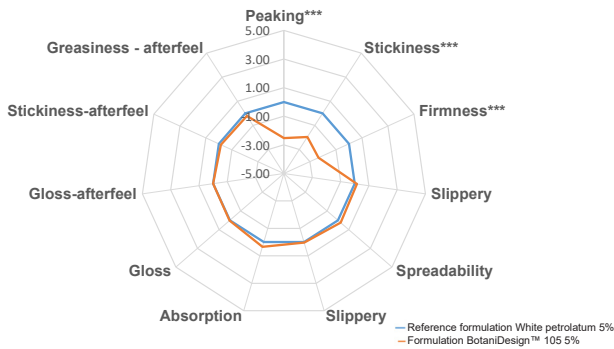
**BotaniDesign™
105**



TEWL performance of neat BotaniDesign™ 105 was on par/slightly better than that of neat petrolatum.

Evaluation of the sensory profile of the **raw ingredient** BotaniDesign™ 105 compared to the benchmark white petrolatum.

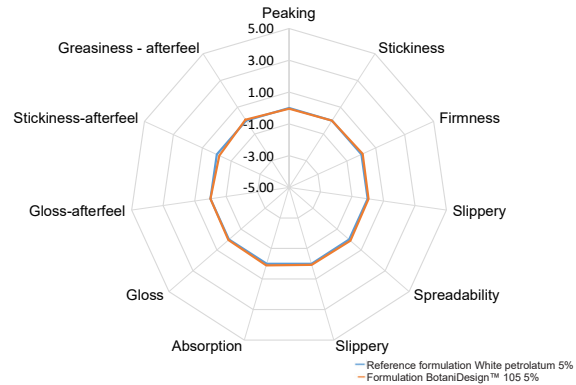
Evaluation of the sensory profile of a **cream formulation** containing 5% raw ingredient BotaniDesign™ 105 compared to the cream containing 5% of white petrolatum.



BotaniDesign™ 105 is less peaking, less sticky and less firm compared to White Petrolatum

Expert panel:

- Number of panelists: 8
- Age range: 30-75 y old
- Gender distribution: 4(M) – 4(F)



No significant difference between the BotaniDesign™ 105 as compared to White Petrolatum

Expert panel:

- Number of panelists: 11
- Age range: 30-75 y old
- Gender distribution: 4 (M) – 7 (F)

Product details

- CAS N°: 69028-36-0 and 100684-29-5
- EC N°: 309-701-9
- Shelf Life: 2 years
- Packaging: 16 kg Pail, 176 kg Drum, Bulk

Contact us at: beauty@cargill.com

¹ ISO 16128-1:2016 and ISO 16128-2:2017

² This product when tested was found to be readily biodegradable according to OECD 301B

³ The responsibility of a vegan claim lies with the cosmetic manufacturer. Please consult your own legal or regulatory experts to ensure suitability of the product with your preferred standard.

⁴ Cargill has not tested BotaniDesign™ 105 in final OTC drug formulations. Compliance with FDA regulations is the responsibility of the customer

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