



BotaniDesign™

Ultra-rich, glossy, biodegradable jelly emollient



**DERIVED NATURAL
ACCORDING TO
ISO 16128¹**



**COSMOS
APPROVED²**



**READILY
BIODEGRADABLE³**



VEGAN SUITABLE⁴

CARGILL SUSTAINABILITY SCORE



Origin:

- INCI: Hydrogenated Vegetable Glycerides
- BotaniDesign™ is an ultra-rich, readily biodegradable petro-free emollient. Derived natural, with a smooth nourishing skin-feel, BotaniDesign™ is the ideal alternative to petrolatum for bringing richness to formulations and providing enhanced skin & hair care benefits.
- Botanical origin: Castor (*Ricinus communis*) and Rapeseed (*Brassica napus*) 100% Derived Natural ; Palm Free and Non-Genetically Modified

Benefits:

- Supports skin barrier health
- Highly occlusive for TEWL reduction
- Enhanced moisturization
- Offers ability to create microemulsions
- Provides post-rinse moisturization
- Adds gloss to lip formulations
- Non-Comedogenic

Technical data:

- Appearance: White to off-white semi-solid (25°C)
- Drop point (typical): 50°C
- Shelf life: 12 months

Uniqueness:

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

One-pot process:

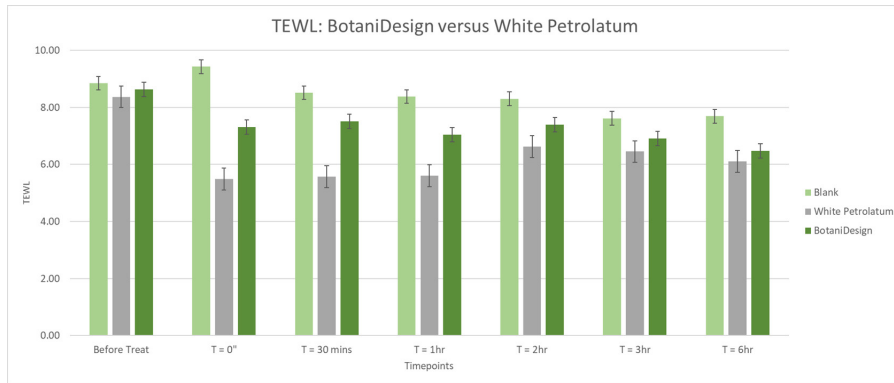
- Esterification reaction
- 100% output capture
- Solvent-free reaction

Applications



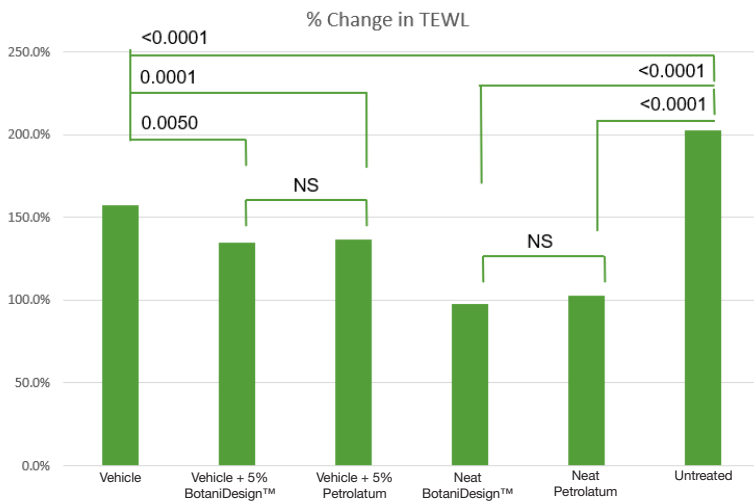
High performance in skincare benefits: Trans-epidermal water loss (TEWL)

BotaniDesign™



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

Skin barrier protection



BotaniDesign™ and Petrolatum in a lotion @ 5% both performed better ($p < 0.05$) than the vehicle lotion (14.5% and 12.9%, respectively).

Neat BotaniDesign™ and Petrolatum were statistically equivalent, and were 52% and 49%, respectively, better than untreated skin.

BotaniDesign™ provides barrier protection similar to Petrolatum

Product details

- CAS N°: 69028-36-0 and 100684-29-5
- EC N°: 309-701-9
- Shelf Life: 12 months
- Packaging: 17 kg Pail, 190 kg Drum, Bulk

Contact us at: beauty@cargill.com

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

² Cosmos standard v4, 2023

³ This product when tested was found to be readily biodegradable according to OECD 301b

⁴ 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.

⁵ Internal Cargill Consumer study was conducted to understand consumer acceptance of two skin creams, during application, after absorption and after 6 hours of wear (Test cream contained 5% BotaniDesign™ and Control cream contained 5% petrolatum). Number of panelists included 57 females and 26 males (total 83); samples were served in a completely randomized, sequential monadic order, one at a time. Preference was analyzed by a two-tailed Binomial test

⁶ Cargill has not tested BotaniDesign™ in final OTC drug formulations. Compliance with FDA regulations is the responsibility of the customer

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