Panalane® Range

High stability ultra-light emollients

INEOS Oligomers

Panalane® L-14E
Panalane® H-300E

INCI:	Hydrogenated Polyisobutene
CAS #:	68937-10-0
EC #:	Exempt

Good alternative for silicone oils

Excellent stability

Great biocompatibility

Excellent spreadability & solubilizing characteristics

Excellent pigment dispersing agent

Recommended applications

Hair Care
Skin Care
Baby Care
Sun Care
Color Cosmetics

VEGAN

China IECIC 2015

Panalane® hydrogenated polyisobutene emollients are versatile cosmetic emollients ideal for a wide variety of personal care products. They are available in low and high viscosity grades that are easily blendable..

Panalane® emollients are ideal for use in color cosmetic and lip products due to their characteristic rich feel, waterproofing capability and moisturizing effects.

They reduce emulsion droplet size and can increase viscosity.

They also facilitate ease of application in lip treatments and improving wear resistance, thus limiting bleeding and feathering.

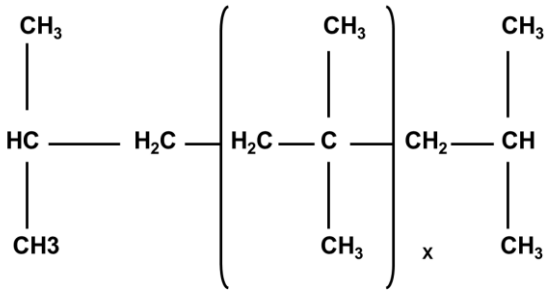
Panalane® H-300E in particular is an effective water-proofing agent for sunscreen formulations.

It is affordable, easy to use, safe and non-irritating to skin.

Vantage

Chemical structure

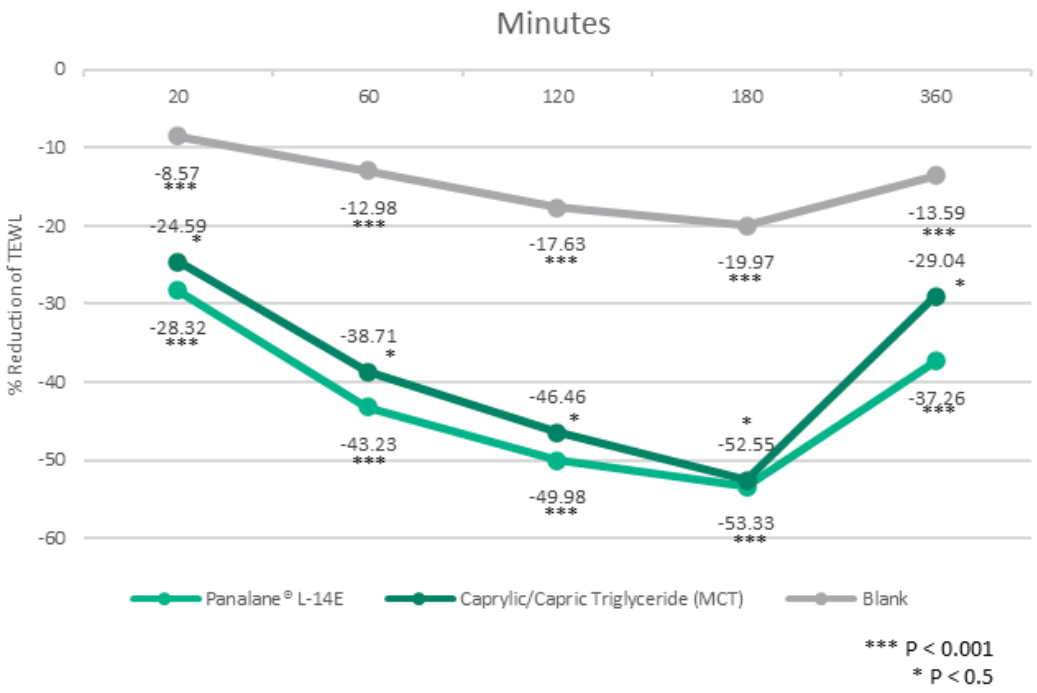
Panalane® emollients feature a branched chain aliphatic hydrocarbon chemical structure.



Skin care benefits

Panalane® L-14E caused a greater reduction in TEWL as compared to Caprylic/Capric Triglyceride.

Method
- Study was performed on 10 female panelists and the average percentage of TEWL, or conductance shown.
- Application of blank formulation and formulation containing, Caprylic/Capric Triglyceride (MCT), were performed for controls.
- Control formulation.



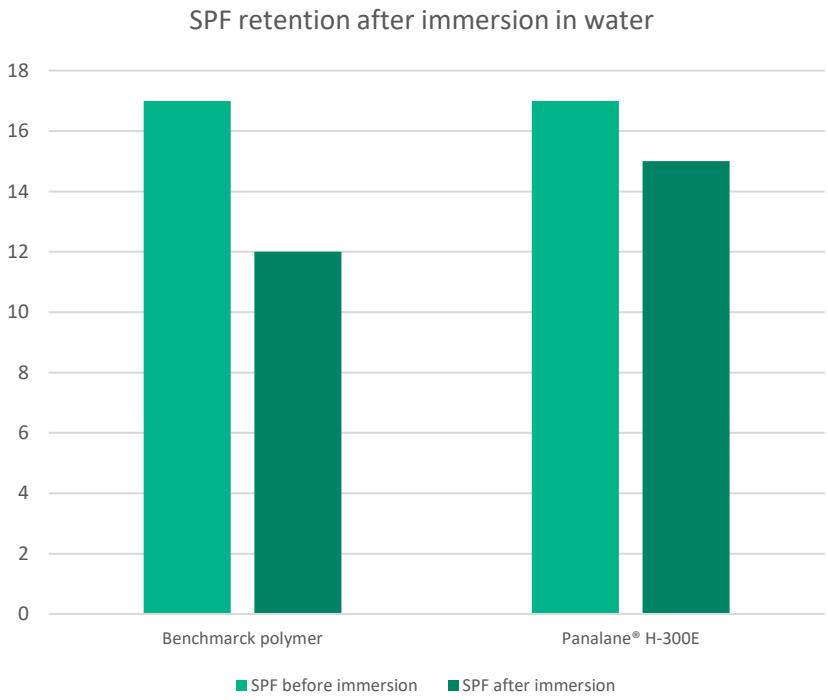
Sun care benefits

Panalane® H-300F film-properties can be used to increase water-resistance of sun care formulations.

Panalane® H-300E is an effective water-proofing agent for sunscreen formulations. It is affordable, easy to use, safe and non-irritating to skin.

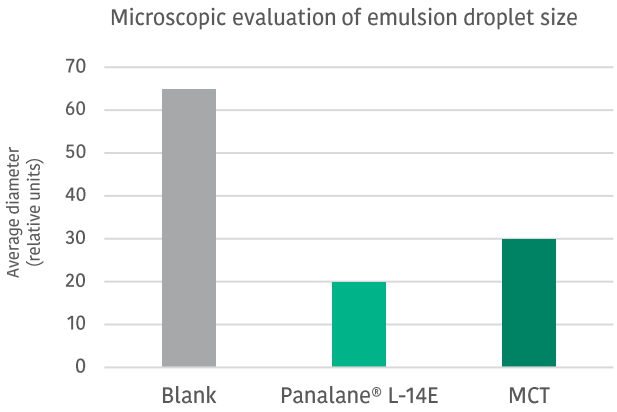
A control sunscreen formulation containing a commonly used waterproofing polymer was compared to a sunscreen formulation containing Panalane® H-300E. Both sunscreen formulations exhibited a static SPF of 17. After water immersion testing, the SPF of the control was reduced to 12 compared to 15 for the Panalane® H-300E formulation.

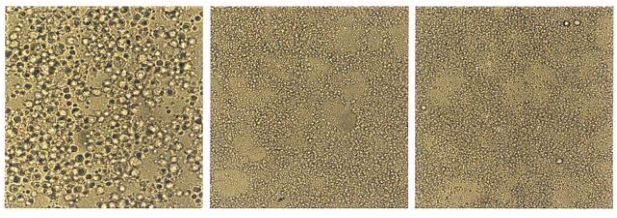
The fact that typical sunscreen filters are soluble at high levels in Panalane® H-300E makes it an ideal waterproofing agent for these systems.



Effect on emulsions' structure

Panalane® emollients can be readily emulsified at room temperature and lead to extremely fine emulsions, as characterized by microscopic evaluation of traditional O/W emulsions





Panalane® emollients contribute to finer emulsions, improving stability and feel.

Panalane® Range

High stability, ultra-light emollient

Grade	Panalane® L-14E	Panalane® H-300E
INCI	Hydrogenated Polyisobutene	Hydrogenated Polyisobutene
Viscosity (cSt) @ Temp. (°C)	@38; 27.0 min; 37.0 max	@99; 635 min; 690 max
Color, Pt/Co	10	20
Haze, APHA, Max.	5	10
Bromine Index, Max.	1000	1000
Molecular Weight, Mn	370	1300
Flash Point (°C) Cleveland Open Cup Pensky-Martens Closed Cup	 >138 >235 >115 >160	 >138 >235 >115 >160
Surface Tension. Dynes/cm, 25°C	28.8	80.9
Appearance	Clear	Clear
Odor	Characteristic	Characteristic
Specific Gravity @ 15.5°C	0.825	0.885
Viscosity (SUS) @ 100 °C	138	2930
Refractive Index	1.464	1.498
Recommended use level	1-20%	1-20%

Other recommended applications

Skin care – serum – face oils
- Light feel
- Fast absorption
- Dry after-feel
- Moisturizing
- Clear and odorless

Face makeup
- Fast absorption
- Dry after-feel
- Good pigment wetting properties

Anti-perspirants / Sticks
- Good glide
- Fast absorption
- Dry after-feel

Sun care
- Fast absorption
- Dry after-feel
- Good mineral sunscreen compatibility

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www.vantagegrp.com