

Pellicer is...

- Pellicer is a gemini amphiphilic compound which has two hydrophilic tails and 3 hydrophilic groups, deriving from natural fatty acids and amino acids.
- Pellicer L-30's source materials are all plant derived. Any source materials derive from petroleum or animals are not contained. (*Pellicer LB-10 contains Butylene Glycol whose source material is petroleum derived.)
- Repairs damaged skin by permeating into stratum corneum and improves barrier function of skin through the similar function with Ceramide.
- Penetrates into hair interior portion and improves strength, thickness, water content of damaged hair and gives resilience and smoothness.
- Expresses emulsification and dispersion function at very low concentration. Compared to nonionic surfactants, excels in texture and decreases emulsifying cost.
- Gels various kind of oil by the method of D-phase emulsification. Enables it to formulate make up remover or massage oil which are tender to skin.

Skin care function of Pellicer

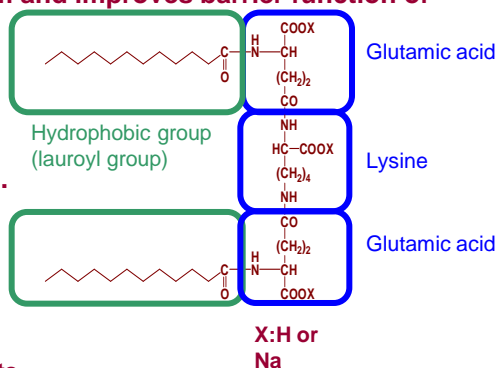
Pellicer brings moisture-feeling to skin, with Pellicer's higher permeability than Ceramide.

-Repairs damaged skin as a result of permeation into stratum corneum and improves barrier function of skin through the similar function as ceramide.

- Permeates into stratum corneum and forms lamellar liquid crystal structure.
- Improves TWEL and Skin hydration level of damaged skin.

- Improves skin elasticity and fineness.

- Brings excellent texture like moisture feeling and penetration feeling.



Chemical structure of Pellicer

Application examples

- Toner, emulsion, cream, serum, pack, and other sorts of skin care products.
- Face wash, bar soap, make up remover, body shampoo
- Hand cream

Recommended use level

- Pellicer LB-10: 1.0%
- Pellicer L-30: 0.3%
- (Solid base concentration: 0.1%)

General Information

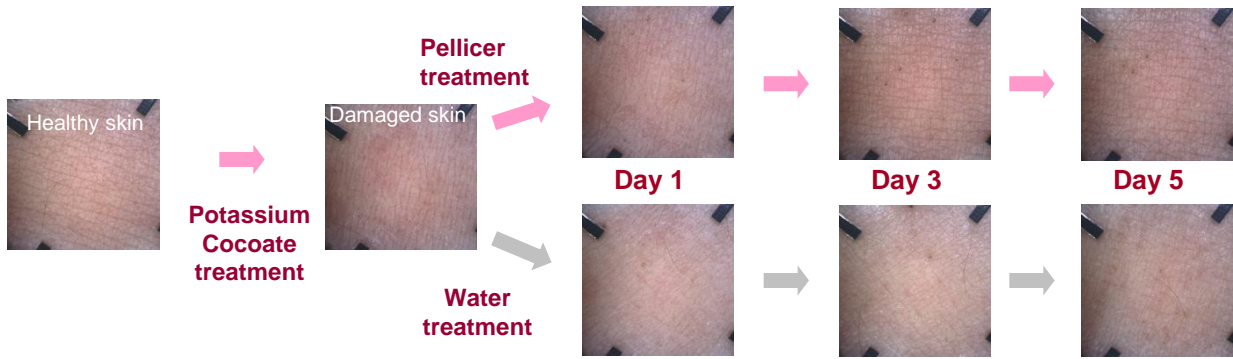
Grade lineup

	Pellicer LB-10	Pellicer L-30
Trade name	Pellicer LB-10	Pellicer L-30
INCI Name* (Concentration %)	Sodium Dilauramidoglutamide Lysine (10%) Butylene Glycol (10%) Water (80%)	Sodium Dilauramidoglutamide Lysine (29%) Water (71%)
Packing	18kg/Can	1kg/Can, 18kg/Can

*INCI NAME of Pellicer LB-10 is under application as of July 15, 2010.

Skin fineness recovery by Pellicer application

Pellicer application (solid 0.1%) improves skin barrier function quickly, and recovers skin fineness.



After having the skin roughened by the closed application of Potassium Cocoate 33% aqueous solution for 1 hour, Pellicer solution (0.1% solid) was applied twice a day, then the skin was observed with a microscope.

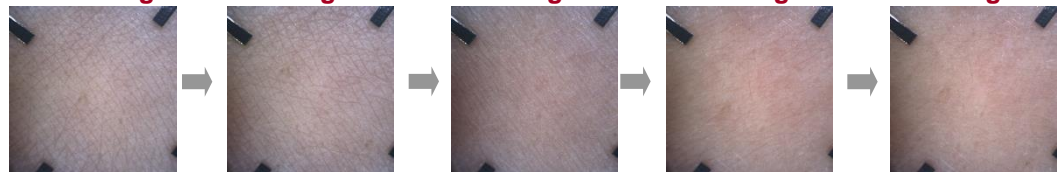
Skin care effect in rinse off application

By adding Pellicer to potash soap, skin fineness is maintained as a result of skin barrier function maintenance even after repeated cleansing with potash soap. Similar effect can be expected in other rinse off applications as well, such as make up remover.

Cleansing with Pellicer added (0.1% solid) Potash soap 33% aqueous solution.

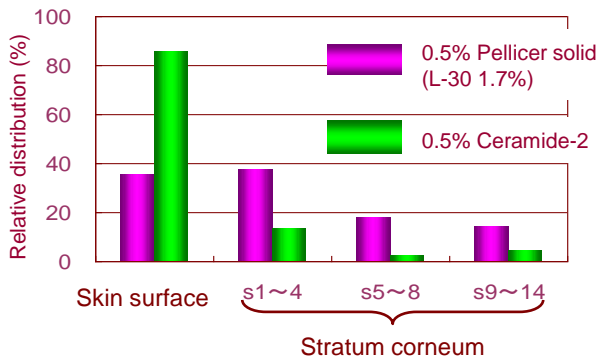


Cleansing with Potash soap 33% aqueous solution



Permeability into stratum corneum

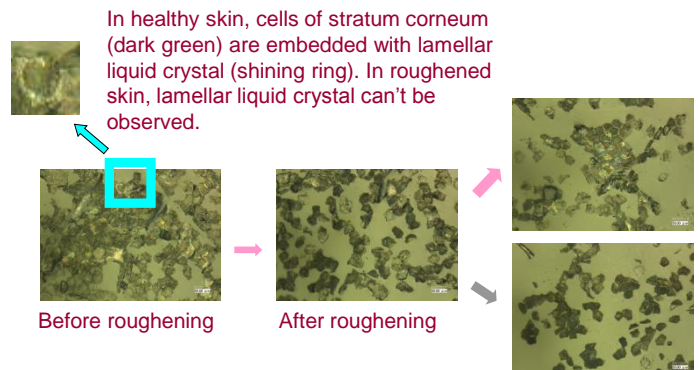
Pellicer penetrates into stratum corneum deeper than Ceramide.



Method: Ceramide-2 or Pellicer (0.5% aqueous) applied on normal undamaged skin, followed by 14 successive skin surface removals with tape strips. Ceramide-2 was dispersed in water containing nonionic surfactants and polyol.

Lamellar liquid crystal structure recovery in stratum corneum

Pellicer restores lamellar liquid crystal structure in stratum corneum.



In healthy skin, cells of stratum corneum (dark green) are embedded with lamellar liquid crystal (shining ring). In roughened skin, lamellar liquid crystal can't be observed.

Test method: Damage imparted by roughening forearm underside with 10% aqueous SDS. Treatment made by application of Pellicer L-30 2.5% solution (0.7% solid content) twice per day. Stripped stratum corneum observed with digital microscope (VHX-900).

<NOTICE> All data, values, and information given here represent typical results based on the specified standards and test methods, but do not represent any warranty or guarantee of any nature relating to performance or utilization, and are subject to change without notice. Please refer to SDS (Safety Data Sheet) before handling our products. With respect to the followings related to products which use Pellicer, please investigate on your own; Safety, compliance with related regulations, and the possibility of violation of any intellectual property right which any third party reserves.