

PENCLEARTM PETROLATUM

Experience the Penreco® difference. Our expertise and reputation were built through years of dedicated partnership with our customers. We are devoted to understanding the unique chemistry required to deliver customized products to meet the specific needs of today's consumer products.

Investing in our research and development is a core principle within Calumet. As the market and regulations continue to shift, Penreco is dedicated to innovation. PenClear™ petrolatum is our newest innovation in our Penreco line of products, replacing BHT with an all-natural antioxidant, tocopherol or vitamin E, which helps to maintain the performance of our products.

APPLICATIONS

■ Cosmetics ■ Pharmaceuticals ■ Personal Care ■ Creams, Balms, Ointments & Lotions ■ Salves & Rubs

PRODUCT SPECIFICATIONS

	Melting Point, °F (°C) USP/ASTM D127	Viscosity SUS @ 210 °F ASTM D2161	Maximum Lovibond Color 2" Cell IP17	Consistency @ 77 °F USP/ASTM D937
PENCLEAR™ PETROLATUM				
SUPER WHITE USP/EP	125/135 (52/57)	_	0.5Y	170/205
SNOW WHITE USP/EP	125/135 (52/57)	64/75	2.0Y	170/205

Product Specifications are subject to change. All product sales are subject to the applicable terms and conditions.

Penreco specializes in NICHE PRODUCT BLENDING to meet customer or monograph (including but not limited to USP/NF, EP, JP) specific requirements.

REGULATORY INFORMATION

- Petrolatum is included on the TSCA Inventory.
- The CAS number for all products listed above is 8009-03-8.
- See Safety Data sheet for additional health, safety and disposal information.
- All Penreco USP petrolatums meet the following FDA regulations: 21 C.F.R. § 172.880 regarding direct food additives, 21 C.F.R. § 178.3700 regarding indirect food additives, and 21 C.F.R. § 573.720 regarding animal food additives.

NOTES

- PenClear products are additized with less than 20 ppm Vitamin E.
- Penreco petrolatums function as carriers, emollients, lubricants, base ingredients, binders, protective coatings, plasticizers, waterproofing, release agents and softeners.
- Test methods used are current USP/ASTM or validated Penreco equivalents.

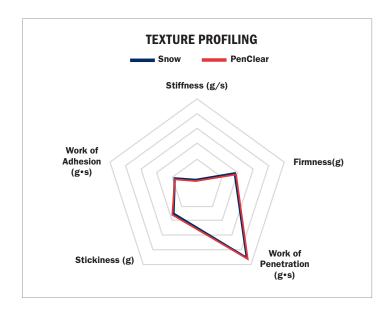


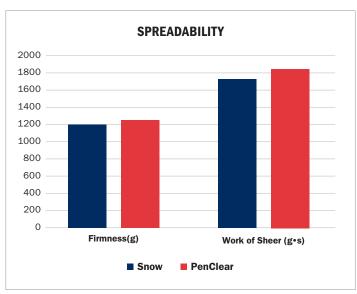
^{*}Typical values based on 2 year average production.



Texture Analysis of PenClear and Snow-White Petrolatum

We performed two different instrumental texture analysis methods between PenClear and benchmark product Snow White Petrolatum. Textural properties measurements included stiffness, firmness, penetration, stickiness, adhesion, and spreadability. The comparison showed no significant differences between the two products validating the PenClear line in terms of quality, aesthetics, and performance. The PenClear line will help customers create BHT-free products in a wide range of personal care and cosmetic applications. Petrolatum is a well-known occlusive moisturizer and skin protectant.





- *Texture Profiling measurements were done on TA.XT Plus texture analyzer using the TA-25 round end probe
- *Spreadability measurements were done on TA.XT Plus texture analyzer using the TA-425 spreadability fixture Study #2023-0001

For product or technical questions, contact your Sales Representative or Calumet Product Support at (800) 437-3188 or email technical@clmt.com.





