

Floraesters K-20W Jojoba in an Astringent Reduces Pore Size While Maintaining Pore Health

As shown in the table below, the addition of 1% Floraesters K-20W Jojoba in an astringent produced directionally significant decreases (*p<0.1) in pore size (as measured by enlarged pore counts) over the vehicle after two weeks of twice daily test article use; and unlike many other natural and synthetic emollients¹ Floraesters K-20W Jojoba did not result in an increase in unhealthy pores (as measured by open comedone, *P. acnes*, and inflamed pore counts).

The astringent with 1% Floraesters K-20W Jojoba (right photo) showed fewer *P. acnes* (*Propionibacterium acnes*) pores (indicated with green dots), particularly within the T Zone (forehead / nasal region), than the vehicle (left photo), both after two weeks of test article use.

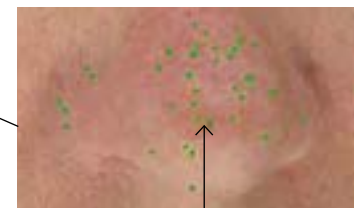
Change in Pore Health

Pore Health Parameter	Test Article	Mean Difference (count)	Subjects that showed a decrease (%)
Open Comedones	Vehicle + 1% K-20W	-20.9	52%
	Vehicle	-8.6	44%
<i>P. acnes</i> Pores	Vehicle + 1% K-20W	-83.3	56%
	Vehicle	25.6	27%
Inflamed Pores	Vehicle + 1% K-20W	-20.6	52%
	Vehicle	-9.0	44%
Enlarged Pores	Vehicle + 1% K-20W	-14.2*	44%
	Vehicle	91.0	39%

P. acnes Pores



Vehicle



● *P. acnes* pores



Vehicle + K-20W

Pore health parameters were measured by counts of open comedones (defined as a partially blocked pore, i.e., blackhead), *P. acnes* pores (defined as pores with an altered pH level that creates a breeding ground for acne), inflamed pores (defined as a pore with irritation due to an accumulation of excess sebum), and enlarged pores (defined as an enlarged pore that meets the detectable size threshold of >0.5mm) using the Clarity Pro Advanced skin analysis system with the Facial Stage DM-3. Pore health evaluations were conducted at baseline and after two weeks of twice daily home application of the astringent using a nonwoven cloth. This procedure was repeated for the second astringent test article (following an additional washout).

Floratech Ingredient: Floraesters K-20W Jojoba

Vehicle (%wt/wt): Water (q.s.), Alcohol Denat. (20.00%), Glycerin (4.00%), Hamamelis Virginiana (Witch Hazel) (and) Water (and) Alcohol (4.00%), Acetyl Glucosamine (0.50%), Butylene Glycol (0.50%), Disodium Phosphate (0.10%), Creatine (0.10%), Trehalose (0.10%), Water (and) Sodium Hyaluronate (0.10%), Blue 1 (and) Red 40 (and) Red 1 (and) Propylene Glycol (and) Water (and) Preservative (0.08%), Disodium EDTA (0.05%), and Phenoxyethanol (0.02%)

The clinical study of Floratech® test formulation (CTL_12-047) was conducted on a panel of 26 healthy women ranging from 18 to 57 years of age with normal skin on the face. The data presented above was taken over 2 weeks (baseline and 2 week measurements) with twice daily at-home applications of the test article. All images were taken under controlled temperature and humidity conditions, followed by analysis by the BTBP Clarity Pro Advanced software. This study was double-blind, crossover, and randomized. The BTBP Clarity Pro Advanced and Facial Stage DM-3 are products of BrighTex Bio-Photonics, LLC (San Jose, CA). (Clinical Study 12-047 report available upon request.)

1. Fulton JE. Comedogenicity and irritancy of commonly used ingredients in skin care products. *J. Soc. Cosmet. Chem.* 1989; **40**: 321-333.