ABS POMEGRANATE STEROLS
Gloss Effect + Intense Moisturization + Skin Barrier Benefits + Hair and Skin Care

Tomorrow’s Vision... Today!®
ABS POMEGRANATE STEROLS

Technical Information:

Product Code: 10247

INCI Name: Punica Granatum (Pomegranate) Sterols

INCI Status: Approved

Suggested Use Levels: 0.5 – 5.0%

Suggested Applications: Moisturization, Hydration, Enhanced Barrier Function, Color Cosmetic Applications, Hair and Skin Care

Solubility: Oil Soluble
Medicinal + Nutritious

• One of the oldest medicines known to man – approximately 8,000 years old

• Today, pomegranates are primarily used in food products

• Traditionally, extracts from the pomegranate have been used for their astringent properties in skin care applications

• Pomegranates are a natural source of conjugated linolenic acid → this has been shown to increase lipid metabolism
  • Many of the benefits of pomegranates may actually come from its oils
ABS Pomegranate Sterols

- Ideal marketing for super fruit and natural cosmetic trends
- Imparts benefits in skin care formulations like moisturization and enhancing the skin’s barrier function
- Adds gloss appearance to color cosmetics like eye shadows, cream blushes and lip products
- Intense hydration benefits when incorporated into hair care formulas
ABS Pomegranate Sterols

- Ideal as a natural replacement for synthetic materials such as:
  - Petrolatum
  - Lanolin
  - Animal-derived materials

- Soluble in Oleyl Alcohol, Cetyl Ethylhexanoate, Mineral Oils, Polybutene, and Phenyl Dimethicone (at 60C)

- Dispersible in Castor Oil

- Insoluble in Ethanol, Glycerin, Dimeticone and Cyclomethicone
ABS POMEGRANATE STEROLS
EFFICACY ASSAY RESULTS

Hydration Potential Study

Graph 1. ABS Pomegranate Sterols is capable of holding more than double its weight in water and therefore will effectively hydrate the skin.

Protocol

- British Pharmacopoeia Water Absorption Capacity Method
- Water is dripped into a product sample
- Mixed at room temperature with a mortar and pestle until terminal point is reached
- Terminal point is defined as the point at which no more water can be missed into a solution
- Water Holding Capacity Coefficient (Amount of Water Contained/ Sample Weight) * 100
ABS POMEGRANATE STEROLS
EFFICACY ASSAY RESULTS

Barrier Function Study – Coefficient of Permeability

Graph 2. Coefficient of permeability demonstrates that ABS Pomegranate Sterols is more effective in enhancing the skin's barrier function

Protocol

- Mixture of sample and mineral oil applied to filter paper
- Filter paper placed on top of a cup containing \( \text{CaCl}_2 \) solution
- Conditions:
  - Time = 24 hours
  - Temperature = 25°C
  - Relative Humidity = 95%
- The weight of the moisture permeated through the filter paper was measured as increased weight
- Coefficient of Permeability is a percentage comparing weight increase with a control to which no oils were applied
- Inverse relationship between coefficient of permeability and barrier function
ABS POMEGRANATE STEROLS
EFFICACY ASSAY RESULTS

**in-vivo Moisturization Assay**

**Protocol**

- 10 m/f – ages 22 to 41 applied two lotions to randomized areas on their volar forearms
- A control lotion (Cetaphil Moisturizing Lotion) and 5.0% ABS Pomegranate Sterols + Base Lotion to the respective skin lotion
- Applied lotions twice a day
- DPM 9003 Nova Meter was used to measure the baseline moisture level and then again at 7, 14, and 21 days
- Comparison of untreated test site, control lotion and test lotion were made

**Graph 3.** Average skin moisturization readings for participants at each of the three test sites over a period of three weeks
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EFFICACY ASSAY RESULTS

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**Graph 4.** Comparative skin moisturization results of the three test sites over 3 weeks
SAFETY TESTING AVAILABLE

ABS Pomegranate Sterols

✓ AMES
✓ Scarification Assay
✓ RIPT
✓ Neutral Red Cytotoxicity Assay
✓ *in-vitro* Dermal and Ocular Irritation Test
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Solubility:  Oil Soluble