

## Poly-Pore<sup>®</sup> 404HA Hyaluronic Acid Delivery System Technical Data Sheet

**Description:** A multifunctional delivery system useful in a wide variety of cosmetic and personal care products and formulations. Supplied as a free flowing white powder, PP404HA contains no preservatives or surfactants. Hyaluronic acid (hyaluronan) is a glycosaminoglycan with anti-inflammatory action. **Hyaluronic Acid** is a primary component of healthy skin, about 50% of the structural HA in the body is contained in the skin matrix. Declining skin levels of hyaluronic acid are associated with dryness, reduced flexibility, and wrinkles.

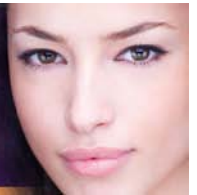
### *Improve Formulation Simplicity and Elegance*

PP 404 HA contains a 4 % loading of low molecular weight Hyaluronic Acid, inside the matrix of the Poly-Pore polymer. Because of the unique multifunctional characteristics of the system, when using PP 404HA it is now possible to add hyaluronic acid directly to anhydrous formulations..

### *Controlled Delivery of Functional Ingredients*

The matrix of the Poly-Pore delivery system provides a ready "reservoir" for active ingredients. The release of these ingredients occurs through a combination of friction and diffusion, providing a substantially slowed release of the active. The slowing of the release of Hyaluronic Acid helps provide sustained release for extended effectiveness.

<b>Typical Properties</b>	
Composition:	Allyl Methacrylates Crosspolymer and Sodium Hyaluronate
Appearance:	White, free flowing powder
Hyaluronic Acid Level:	4 ± 2.0%
Loss on Drying:	less than 3.0%



## Benefits

- Enables, simple incorporation of Hyaluronic Acid in all types of personal care products, including gels, emulsions, creams, and loose and pressed powders.
- Improvement in skin moisture and smoothness
- Provides sebum control reducing shine and extending wear in color cosmetics
- Enhances emulsion stability
- Improved efficacy of other actives such as Retinol in combination products

## Typical Applications

- ❖ Facial treatments and skin care products including gels, emulsions, and anhydrous products
- ❖ Make-ups and Foundations incorporating skin-care benefits
- ❖ Daily use moisturizers and lotions
- ❖ Exfoliating gels and treatments
- ❖ Loose and pressed powders

**Storage Recommendations and Shelf-Life:** Storage under normal warehouse conditions, ranging from  $\leq 70^{\circ}$  F, in a tightly sealed container.

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