# Health & Beauty Solutions, Inc.

# Poly-Pore<sup>®</sup> 337 HP Hydrogen Peroxide Delivery System

**Description:** A multifunctional delivery system useful in personal care applications for tooth whitening, skin tone evening and oxygen delivery. Poly-Pore® 337 HP is supplied as a white powder and can easily be dispersible in emulsion, gel, anhydrous, or even powder based formulations. PP337HP contains no additional preservatives or surfactants.

	Typical Properties
Composition:	Allyl Methacrylates Crosspolymer (and) Water (and) Hydrogen Peroxide
Appearance:	White powder
Hydrogen Peroxide Level:	34.5 -40.5%

# Improve Formulation Simplicity and Elegance

Poly-Pore® 337HP contains a 37.5% loading of hydrogen peroxide, inside the matrix of the Poly-Pore polymer. Because of the unique multifunctional characteristics of Poly-Pore, the dispersion of hydrogen peroxide in any system, even anhydrous gel, is now a simple process of adding Poly-Pore® 337HP directly to the formulation. The result is improved feel and greater formulation versatility.

#### **Stabilize and Protect**

This entrapment results in a form of hydrogen peroxide that is very stable. The product was evaluated on accelerated aging studies at 50C for four weeks with no change in the concentration of hydrogen peroxide during that time (see Figure 1).

## **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 hydrogen peroxide helps minimize irritation.

#### **Benefits**

- Enables simple incorporation of hydrogen peroxide in all types of personal care products, including gels, emulsions, creams, and loose and pressed powders
- Extended release of hydrogen peroxide results in reduced irritation and long-lasting availability at the site of action
- Provides sebum control
- Provides secondary thickening in gels and emulsions



### **Typical Applications**

- Tooth whitening products in stick or paint-on formulations
- Daily use products that deliver oxygen to the skin
- · Facial and body masks
- Loose and pressed powders

Storage Conditions: Store in unopened container in 63 - 77°F

Shelf Life: 12 months when stored in proper conditions

