

# MICROSPONGE® N 720TRA

# All-Natural Delivery System

Microsponge® N 720TRA (MSN 720TRA) is a retinaldehyde delivery system based on the novel Microsponge® N natural microparticle. The MSN technology provides sustained released retinaldehyde to your anti-aging formulations. MSN 720TRA is a yellow free-flowing powder that can be readily dispersed in gels, emulsions and powders, minimizing the handling problems associated with many retinoid products. MSN 720TRA also is a source of BHA- and BHT-free retinaldehyde and is not subject to listing under California Proposition 65.

# **Typical Properties**

Composition: Cellulose, Retinal and Tocopherol

Appearance: Yellow, Free flowing powder

Retinaldehyde

Concentration: 20.0% +/- 2.0%

#### **Stabilize and Protect**

MSN 720TRA isolates retinaldehyde deep within the core of the Microsponge® N matrix, helping to minimize exposure to light and oxygen. It also incorporates an antioxidant system to help further protect the product from degradation, and to improve the ability to formulate with the material under normal processing conditions.

#### **Controlled Delivery of Functional Ingredients**

The matrix of the Microsponge® N delivery system provides a ready "reservoir" for retinaldehyde. The slow release of retinaldehyde occurs through a combination of friction and diffusion.

The Microsponge® N delivery system is proven to provide sustained release of retinol that results in less irritation while maintaining efficacy - this technology is expected to provide similar results for retinaldehyde.

Retinaldehyde and retinol are naturally converted to retinoic acid in the skin with the retinoic acid providing the anti-aging properties that retinoids are known for. As the natural conversion path in the skin is retinol -> retinaldehyde -> retinoic acid, retinaldehyde is the retinoid that is the closest to the active form that is available without a prescription.

## **Benefits**

- Natural microparticle delivery technology
- Source of BHA-free retinaldehyde not subject to listing under California Proposition 65



## **Typical Applications**

- Anti-aging and skin rejuvenation products
- Cellulite treatments
- Make-ups and foundations incorporating skin-care benefits
- Daily use moisturizers and lotions
- · Facial and body masks
- Loose and pressed powders
- · Hand and body lotions

#### **Recommended Use Levels**

Typical use levels of the Microsponge® N 720TRA in formulations is in the 0.5 to 5% range. For additional information, contact your HBS Sales representative.

#### Certifications

- The Microsponge® N delivery system microparticles (exclusive of entrapped actives) meet the requirements
  of ISO 16128 for natural and organic cosmetic ingredients and is certified to conform with the COSMOS v3.0
  standard.
- The Microsponge® N cellulose-based delivery system is produced from only legally harvested wood from sustainably managed forests which do not meet the criteria for forests of exceptional or high conservation value. The suppliers have one or more of the recognized Third Party Safe Forest Management Certification Standards and promote the certification of their public and private timber sources: Forest Stewardship Council (FSC), Sustainable Forest Initiative (SFI), Pan European Forest Certification (PEFC), Canadian Standards Association (CSA); American Tree Farm System (ATFS).

#### **Storage Recommendations:**

Retinaldehyde must be kept in original container under refrigerated storage until use. For best results, use the complete package after opening.