



Blanova DS 901

Zeolites for a Warming Sensation

creating value,
growing together

Value Proposition

Azelis Americas PC and H&IC provides comprehensive service through the delivery of specialty chemical solutions for the formulation of Personal Care and Home Care & Industrial Cleaning products.

Our super-regional footprint accompanied by our technical competence and our optimized marketing platform exemplify our value-added standards to both our supplier partners and customers.



Blanova DS 901

Zeolites for a warming sensation

Unique structure driving performance

- Three dimensional crystalline structure
- Porous, high surface area

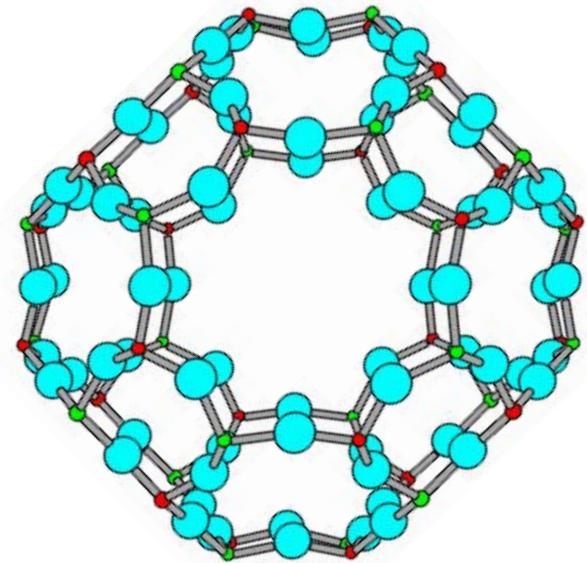
Warming Sensation

- High quality active microporous powder
- Creates heat when exposed to water, providing a warming sensation



Features and Properties of Zeolites

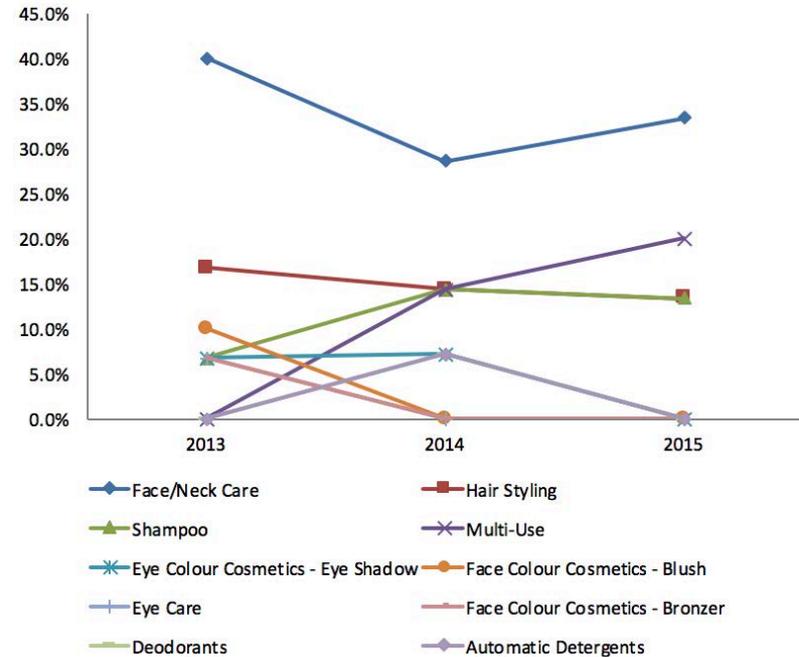
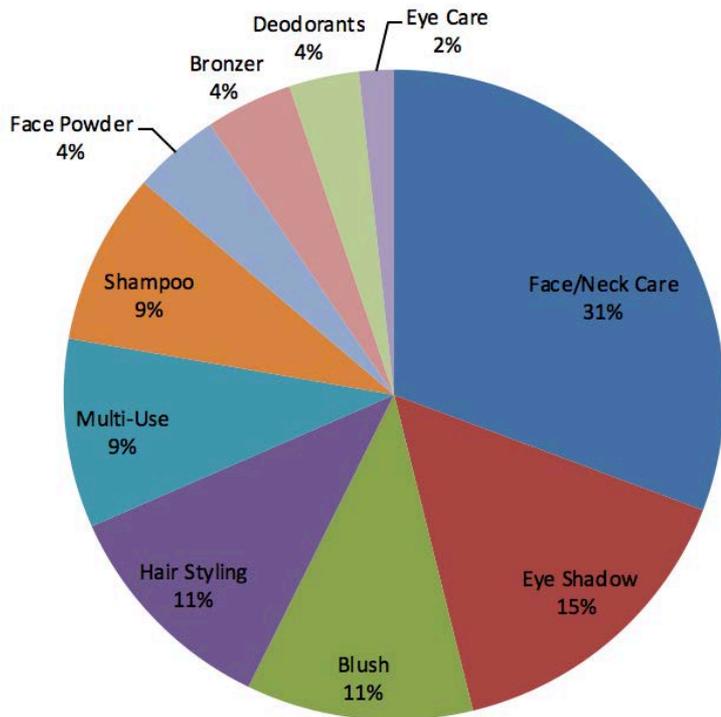
- Zeolites are three dimensional crystalline, high surface area, porous networks of silicon and aluminum atoms connected by oxygen atoms.
- The negative charge introduced by aluminum (substituting silicon) is balanced by cations or protons in the structure.
- Presence of cations typically lower the effective pore size.
- Zeolite pore sizes are uniform and approach the dimensions for various molecules (i.e. 3-8 Å).



US Product Applications Incorporating Zeolites

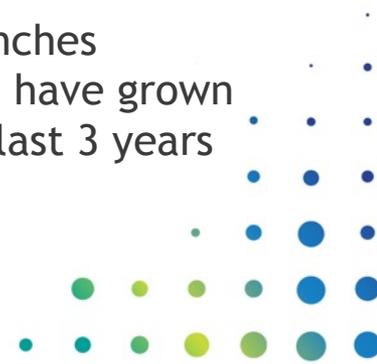


North America Product Launches 382 products found



Multi-use product launches incorporating Zeolites have grown consistently over the last 3 years

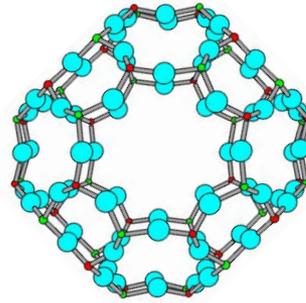
Color cosmetics and skin care product launches dominate



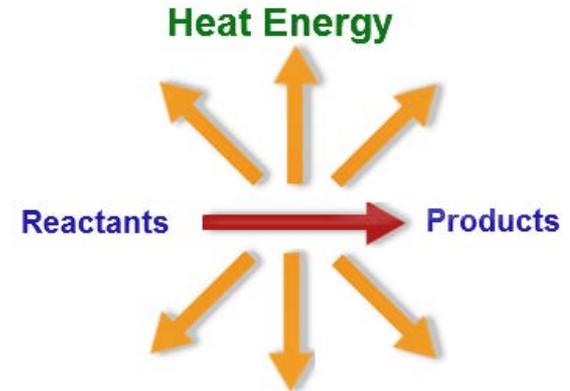
Warming Sensation Mechanism of Zeolites



+



=



Water + Zeolite = Heat

- The exothermic reaction (warming sensation) is directly linked to the moisture content of the skin
- Depending on the amount of moisture on an individual's skin, there may be a slight warming effect noticed upon initial contact of the product with the skin
- It is generally best to slightly dampen the skin prior to applying the zeolite product. As more water is added the heating effect will dissipate more rapidly as it acts as a heat sink



Blanova DS 901 Features and Advantages



High Quality Active Microporous Powder

- High Al content, Na, K counter ion
- Hydrophilic, dehydrated Type-A Zeolites
- Effective at creating heat when exposed to water, pleasant warming sensation during use
- Only for anhydrous formulations
 - Better to formulate under vacuum
- Hygroscopic: store in an air tight container in a dry environment
 - Re-Activation is possible: vacuum drying @ 110° C for 12 hours or 150° C for 4 hours
- Use level: 10 - 30%

Warming Effect Applications

- Face masks
- Body treatments
- Anti-Blackhead Cleanser
- Lip care products



Products on Market using Zeolites

Color Cosmetics are not only the #1 application for Zeolites currently, but also the category with more growth within the US Personal Care market (19% total growth forecast from 2015-2020)

Trend Concept: Seasonal Fashion Color Trends

Masks offer an impressive 32% total growth forecast

Trend Concept: Indulgence, Personalization

Warming Illuminating Powder



“Inspired by the atmosphere of long winter nights. Dermatologically-tested powder features champagne and bronze shades and can be custom-blended to instantly create a subtle winter glow.”

Self Heating One Minute Mask



“Unique formula heats on contact with water to open pores and draw out pore-clogging dirt and oil, then cools leaving skin tightly smooth and refreshed”



Blanova DS 901

- The formulation has to be completely anhydrous
- Glycols, lower molecular weight polyethylene glycols and lipids are common bases
 - Lipids can reduce the heating effect as they delay the contact of water with the zeolite
- They are best added to the formulation at the end of the process and it is advisable to add a vacuum step to ensure that all air has been removed from the system
- Typical use levels are 20 to 30%
- The preferred pH range for use is from about 4 to 8
- Blanova zeolite grades are heat stable



Mission Statement



“To Build Unwavering Customer Loyalty”

We accomplish through:

- Developing long-term customer and supplier relationships by providing innovative solutions to meet the formulating and production needs of our customers.
- Employing a leading team of technical sales people, supported by an exceptional service organization.
- Demonstrating the highest level of integrity in every transaction to the mutual benefit of our customers, suppliers and employees.

