

## Intelimer® Polymer Technology

Intelimer polymers are patented, side chain crystalline homopolymers with a long chain acrylate group in the backbone. They exhibit a very sharp melt point with small hysteresis. The polymers' temperature switch characteristics allow them to exhibit rapid changes in properties, such as permeability, adhesion and viscosity, over temperature ranges as narrow as 1 to 2 °C.

### Sample Applications\*

- Aromatherapy Products
- Animal Care Products
  - Hair, hoof, and shine products
- Antiperspirant / Deodorant (spray, aerosol, cream, roll-on)
- Anti-aging and Anti-wrinkle Applications
- Anti-Acne Applications
- Body Care Applications
  - Body washes, gels, and lotions
  - Soaps
  - Body moisturizers
  - Enhancing/vitamin enriching/revitalizers
- Color Cosmetic Applications
  - Eye pencils
  - Eye liners
  - Foundation
  - Lip Products
  - Lip Balms
  - Lipogels
  - Make-up and pigmentation products
  - Make-up removal
- Cosmeceutical Applications
- Facial Care Applications
  - Washes
  - Enhancing/vitamin enriching/revitalizers
  - Oil and blemish cleansers
  - Facial strips
  - Masks
  - Night treatments
  - Scrubs and exfoliants
  - Toners
  - Shaving Care
- Hair Care Applications
  - Anti-dandruff products
  - Hair oils and gels
  - Shampoos
  - Conditioners (wash-off and leave-in)
  - Hair spray and fixatives
  - Styling gels
  - Hair removal products
  - Hair growth products
- Moisturizers and Body Creams
- Nail Care Products
  - Nail color
  - Nail polishes
  - Nail treatments
  - Nail color removers
- Oral Care
  - Teeth whitening products
  - Mouth wash solutions
- Perfumes and Colognes
- Various Skin Care Applications
- Spa and Bath Products
  - Massage oils and treatments
  - Bath salts and oils
  - Bubble bath products
- Specific base chemistry products
  - High oil-based products
  - Petrolatum products
  - High grease products
- Sun Care
  - Sun screens
  - After-sun products
  - Self-tanning and bronzers
- Surfactant Release Systems

### Sample Benefits\*

- Sharp, temperature-based change in properties, with adjustable trigger temperature
- Longer, controlled release/deposition and retention of ingredients
  - Ingredient-independent matrix-based mechanism
  - Actives
  - Volatile ingredients
  - Vitamins/minerals
  - Non-prescription medical compounds
- Wide-range pH stability
- Film-forming properties
  - Water resistance
  - Rub-off resistance
- Temperature-triggered easy wash-off
- Enhanced ingredient dispersion
  - Boost of ingredient efficacy owing to improved dispersion and/or matrix organization
- Non-greasy, silky feel
- Reversible style-restyle of hairs
- Durability/stiffness of hair
- Shine and gloss
- Non-whitening properties
- Rheology modification
- Oil-thickener
- Enhanced benefits through blends and in combination with other polymers, in applications such as styling, feel, sensory, or to enhance other benefits listed

\* This list is not all inclusive and is not meant in any way to limit, constrain, or encompass the extent of usability of Intelimer Polymer Technology. Some applications and benefits have been verified by Air Products, while others are predicted based on general characteristics