



# SYNTRAN<sup>®</sup> Bimodal Polymers

#### For enhanced adhesion & stain blocking

ZS INTERPOLYMER offers a range of waterbased acrylics based on a patented bimodal technology with film-forming properties. This technology combining two different ionic structures in the same polymer network increases the adhesion to multiple substrates, wood tannin blocking, stain blocking and dye blocking. This technology allows a formulator to take advantage of the benefits of a cationic acrylic without the traditional compatibility issues.

## **Product Range**

| SYNTRAN <sup>®</sup> bimodal acrylics |     |            |           |                                                |  |
|---------------------------------------|-----|------------|-----------|------------------------------------------------|--|
|                                       | рН  | Solids (%) | MFFT (°C) | Comment                                        |  |
| 1671                                  | 8.8 | 40         | 55°C      | hard film with excellent wear resistance       |  |
| 6145                                  | 7.5 | 40         | < 10°C    | Soft film with excellent tannin & dye blocking |  |
| 3106                                  | 7.5 | 41         | < 10°C    | Highly Flexible film with excellent adheison   |  |
| PPX 103-08                            | 8.0 | 39         | < 0°C     | Ready-to-use laminaing adhesive                |  |

These SYNTRAN<sup>®</sup> bimodal acrylic polymers are used in multiple markets to give improved performance over traditional acrylic emulsions. Since this is an ZS INTERPOLYMER internally developed technology, we are able to develop tailor-made solutions based on customer requirements.

The diagram below demonstrates the complex anionic-cationic network that is formed during our patented process:



The suggestions and data included are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale. It is the buyer's responsibility to determine the suitability of the above formulation through quality control and field testing. Suggestions for uses of our products should not be understood as recommendations that they be used in violation of any existing or pending patents.





## **Formulating Guidelines**

| Clear Sealer F89-118-02 @30%nv |       |  |  |  |
|--------------------------------|-------|--|--|--|
| Ingredient                     | % wt  |  |  |  |
| Water                          | 24.66 |  |  |  |
| Tributoxyethyl Phosphate       | 3.21  |  |  |  |
| Diethylene glycol ethyl ether  | 4.46  |  |  |  |
| 1% active fluorosurfactant     | 0.71  |  |  |  |
| SYNTRAN <sup>®</sup> 1671      | 66.96 |  |  |  |
| Defoamer                       | q.s.  |  |  |  |
| Total                          | 100.0 |  |  |  |

| Tannin / Dye Blocking Primer F74-031-04 @28%nv |       |  |  |  |
|------------------------------------------------|-------|--|--|--|
| Ingredient                                     | % wt  |  |  |  |
| Water                                          | 27.0  |  |  |  |
| Propylene glycol                               | 1.0   |  |  |  |
| Defoamer                                       | 0.1   |  |  |  |
| SYNTRAN <sup>®</sup> 6145                      | 71.9  |  |  |  |
| Total                                          | 100.0 |  |  |  |

### **Applications**

- Wood tannin & dye blocking coatings
- Blisterpack & lamination adhesives
- Wood & concrete coatings
- Leather, plastic & textile coatings



#### **Our company**

ZS INTERPOLYMER has been producing waterbased specialty polymers since 1963. We manufacture at 4 facilities worldwide (2 in the United States, 1 each in France and China). ZS INTERPOLYMER is a market leader in several application fields:

- Surface care: Polymers for floor care, carpet cleaners and leather care.
- Consumer specialties: Polymers for mascara, household, hair- and skin- care products, etc.
- Industrial specialties: Functional binders for specialty paint and coating applications, polymers for overprint varnishes and inks, flocculants for ceramics, retanning agents.

With close working relationships with customers, our company produces tailor-made products in order to match specific needs. Our technical service and research and development centres will be your creative and innovative partners.

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