



SYNTRAN® Polymers

For wood coatings

ZS INTERPOLYMER offers a range of waterbased acrylics that can be used in wood coatings based on multiple propriery technologies (bimodal and self-crosslinking). These technologies all impart unique properties to the finished coatings:

Bimodal technology combines two different ionic structures in the same polymer network increasing 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.

Self-crosslinking technology combines two different crosslinking mechanisms on the same polymer backbone, which substantially increase the chemical resistance, stain resistance and water resistance of the cured polymer film. This technology was designed for the self-crosslinking mechanism to fully cure at room temperature, but maintain standard, long-term shelf stability.

Product Range

SYNTRAN® acrylics				
	pH	Solids (%)	MFFT (°C)	Comment
6130	8.8	40	52°C	Bimodal film with excellent wear resistance and adhesion properties
6145	7.5	40	< 10°C	Bimodal film with excellent tannin blocking and adhesion properties
1655	8.0	40	74°C	Self-crosslinking film with excellent wear and chemical resistances
1693	7.5	42	< 20°C	Self-crosslinking film with excellent water and chemical resistances

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

Applications

- Furniture and kitchen cabinet coatings
- Flooring, decks, and fence coatings
- Sanding, stain and all-in-one sealers
- Tannin blocking sealers

Formulating Guidelines

Clear Sealer / Topcoat F89-118-02 @30%nv

<i>Ingredient</i>	<i>% wt</i>
Water	24.66
Tributoxyethyl Phosphate	3.21
Diethylene glycol ethyl ether	4.46
1% active fluorosurfactant	0.71
SYNTRAN® 6130	66.96
Defoamer	q.s.
<i>Total</i>	<i>100.0</i>

Tannin Blocking Sealer F74-031-04 @28%nv

<i>Ingredient</i>	<i>% wt</i>
Water	27.0
Propylene glycol	1.0
Defoamer	q.s.
SYNTRAN® 6145	72.0
<i>Total</i>	<i>100.0</i>

Sanding Sealer / Topcoat F74-051-02 @30%nv

<i>Ingredient</i>	<i>% wt</i>
Water	27.0
Propylene glycol	1.0
1% active fluorosurfactant	0.8
Defoamer	q.s.
SYNTRAN® 1693	71.2
<i>Total</i>	<i>100.0</i>

Clear Topcoat F74-051-04 @30%nv

<i>Ingredient</i>	<i>% wt</i>
Water	29.31
Tributoxyethyl phosphate	5.67
Diethylene glycol ethyl ether	3.24
1% active fluorosurfactant	0.81
Defoamer	q.s.
SYNTRAN® 1655	57.13
SYNTRAN® PA-1465	3.84
<i>Total</i>	<i>100.0</i>

Note: add 5% waterbased dye to any of the above sealer formulas to transform into stain sealer.

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.