

# Syntran® Film Formers and Resins

## Improving Color Cosmetics, Hair, and Skin Formulations

Interpolymer's Differentiated Film Formers and Resins have been used in formulations for over 25 years. They can be used in all types of styling aids, mascaras, eyeliners, sunscreens and color foundations.

These products showcase Interpolymer's efforts to refine the multi-functional use of film formers and resins to provide a balance of adhesion, cohesion, gloss, water resistance and film flexibility.

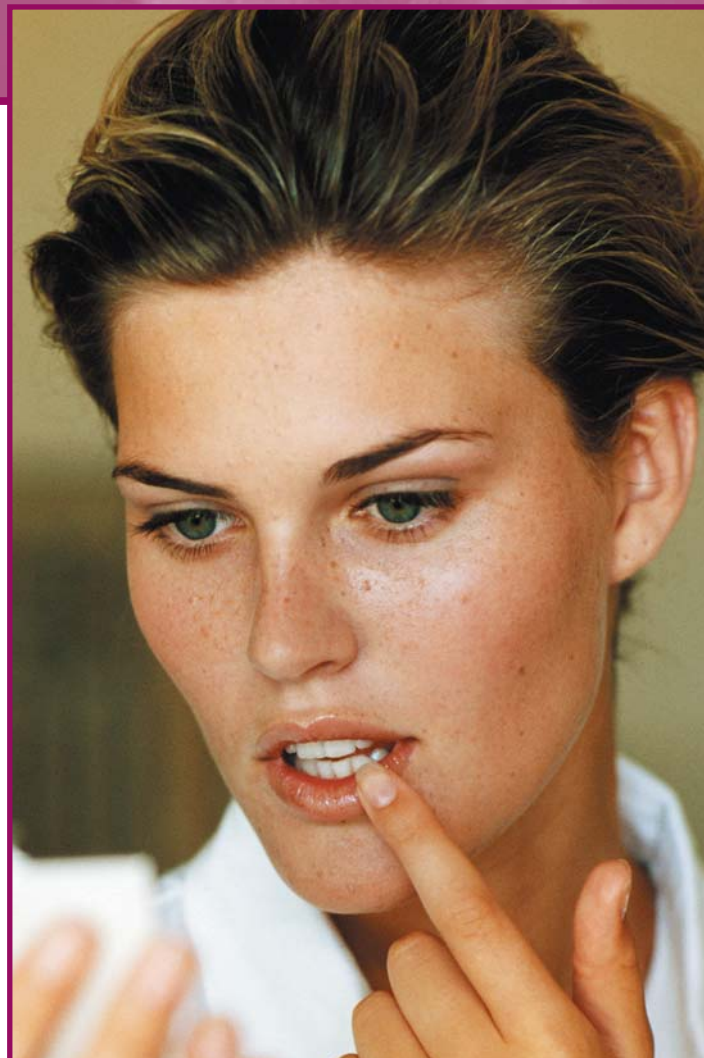
### Benefits

#### Film Formers

- Proven Performance
- Good Adhesion
- Water Resistance
- Improved Flexibility

#### Resins

- Increased Gloss
- Good Flow and Leveling
- Adds Stiffness or "Crunch" to Styling Aid Products
- Excellent Pigment Dispersion



### Typical Physical Properties

Property	Syntran® 5190	Syntran® 5760	Syntran® KL 219-C	Syntran® PC 5400
INCI Name	Acrylates Copolymer	Styrene/ Acrylates/ Ammonium Methacrylate Copolymer	Ammonium Acrylates Copolymer	Ammonium Acrylates Copolymer
Appearance	White Emulsion	White Emulsion	Clear Liquid	Clear Liquid
% Solids	41	41	25	28
pH Value at 22°C	7.5	7.5	8.1	8.0
Viscosity at 22°C, mPa.s	90	90	200	300
Specific Gravity at 22°C	1.054	1.033	1.045	1.060



### Syntran® Film Formers and Resins for Personal Care Applications

#### Performance Guide

10 = Highly Recommended  
1 = Not Recommended

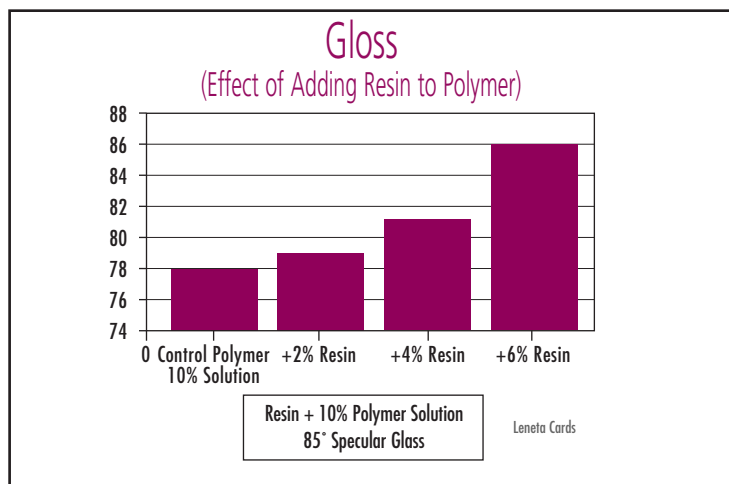
Product	Adhesion	Water Resistance	Flexibility	Gloss	Pigment Dispersion	Hold & Crunch	Flow & Leveling	Comments
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#### Differentiated Film Formers

<b>Syntran 5190</b>	8	7	10	7	–	–	–	Excellent Flexibility Very Good Adhesion Good Water Resistance
<b>Syntran 5760</b>	10	10	8	6	–	–	–	Excellent Adhesion Exceptional Water Resistance

#### Resins

<b>KL 219-C</b>	–	–	4	9	9	7	9	Excellent Co-Emulsifier, Pigment Disperser & Viscosity Thinner & Stabilizer
<b>Syntran PC 5400</b>	–	–	4	10	9	9	8	Excellent Gloss & Tactile Enhancement



### Mascara Viscosity Values with Polymer Plus Resin

Mascara Containing	Viscosity @ 25°C, mPa.s	
	rpm 2.5	rpm 5
<b>10% Syntran 5190</b>	440,000	250,000
<b>10% Syntran 5190 +4% KL-219C</b>	8,000	6,000
<b>10% Syntran 5760</b>	540,000	350,000
<b>10% Syntran 5760 +4% KL-219C</b>	116,000	72,000



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