

# Series 310

## Solvent based Screen Printing Ink for Plastic Injection Moldings

Highly glossy screen printing ink, Series 310, based on very mild solvents for printing on plastic injection

moldings made of Polystyrene and PMMA. Typical applications are promotional items.

### Application

- › Injection-molded promotional items made of Polystyrene and PMMA

### Substrates

Substrate	Rating	Hints
Polystyrene (PS), injection-molded parts of acrylic glass	★★★★★	
Acrylic glass (casted PMMA)	★★★	
Primered / coated foils	★★★	
Rigid PVC	★★★	
Polycarbonate (PC)	★★★	
Polystyrene (PS), mat	★★★	
Paper, cardboard	★★	

**Legend**      ★★★★★ Very well suited      ★ Detailed pre-tests necessary

### Properties / Characteristics

Feature	Rating	Hints
Alcohol- and gasoline resistance	★	
Resistance to adhesives	★	
Block resistance	★	
Flexibility	★★★	
Gloss	★★★★★	Highly glossy
Resistance to hand sweat	★★★	
Light fastness	★★★	See technical information: Light fastness
Abrasion resistance	★★★★★	
Pigmentation	★★★★★	
Sieve openness	★★★	
Temperature resistance	n/a	
Drying	★★	
Moldability	n/a	
Weather resistance	n/a	

**Legend**      ★★★★★ Very good product properties      n/a No information available  
 ★ Product properties not available

## Product Range

### MS Basic Colors

Article no.	Color	HP			Article no.	Color	HP		
310-1000	MS light yellow	•			310-3300	MS magenta	•		
310-1100	MS medium yellow	•			310-4000	MS violet	•		
310-1200	MS dark yellow	•			310-5000	MS blue	•		
310-2000	MS orange	•			310-6000	MS green	•		
310-3000	MS red	•			310-7000	MS brown	•		
310-3100	MS magenta red	•			310-8000	MS black	•		
310-3200	MS dark red	•			310-9000	MS white	•		

**HP** High pigmented

Note I: The MS-basic inks must be processed in combination with the corresponding binder Series 310-07 (min. 20 % by weight).

Note II: All abbreviations used in this chart are explained in detail on the last page of this data sheet.

### Other Colors

<b>ST Metallics</b>	Color Chart / <a href="http://www.printcolor.ch/stcolorguide">www.printcolor.ch/stcolorguide</a>		
<b>ST Neon Colors</b>	Color Chart / <a href="http://www.printcolor.ch/stcolorguide">www.printcolor.ch/stcolorguide</a>		
<b>Special Colors</b>	Pantone <sup>®</sup> , HKS, RAL and after customers sample		
<b>Others</b>	Series 310-00	ST white	
	Series 310-04	Transparent paste	
	Series 310-05	Varnish	
	Series 310-06	Retarder paste	
	Series 310-07	Binder	
	Series 310-33	ST black	

## Auxiliaries

<b>Thinner</b>	Series 700-017	<b>Addition ratio</b>	10 - 20% by weight
<b>Retarder</b>	Series 700-018	<b>Addition ratio</b>	max. 10% by weight

Note: a detailed overview of all available auxiliaries can be found in a separate data sheet.

## Processing

### Mesh

All commercially available polyester mesh can be used.

### Stencils

All commercially available and solvent resistant stencils can be used.

## Drying

Drying of Series 310 depends on the layer thickness as well as on the substrate and the auxiliaries used.

Usual parameters (without addition of retarder):

<b>Air</b>	Physically slowly drying
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## Cleaning

Cleaning of stencils and squeegees should be done with Series 300-URS or Series 300-BRS.

## Special Features & Tips

<b>MS mixing system</b>	MS ink, series 310 (80% by weight) + binder series 310-07 (min. 20% by weight)
<b>Choice of mesh</b>	Because of the reduced drying rate it is recommended to work with finer mesh (12-150 threads/cm).
<b>Stress cracks</b>	In order to ensure that no stress cracks occur, the auxiliaries of series 310 must be used.

## Productivity

Depending on the color shade, a productivity of 50-70 m<sup>2</sup>/kg is to be expected with press-ready ink (20% thinning) and use of a mesh 120.34.

## Others

<b>Delivery</b>	1 kg / 5 kg / 25 kg
<b>Certificates / Standards</b>	<a href="http://www.printcolor.ch/zertifikate">www.printcolor.ch/zertifikate</a>
<b>Other</b>	Stir well before use.
	Information on shelf life can be found on the cover label.

## Basic Color Systems

**HP** Basic Color Mixing System with high pigmented basic colors.

## Safety Information

Actual Material Safety Data Sheets according to EC-Regulation 1907/2006 are available for all products, mentioned in this data sheet.

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## Important Information

Our technical advice whether spoken, written, or through test trials corresponds to our current knowledge to inform about our products and their use. This is not meant as an assurance for certain properties of the products nor their suitability for each application. You are, therefore, obliged to conduct your own tests with our supplied products to confirm their suitability for the desired process or purpose. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, such claims shall be limited to the value of the goods delivered by us and utilized by you with respect to any and all damages not caused intentionally or by gross negligence.