

# Series 540

## UV Screen Printing Ink for Flat Glass and Metal

Silky glossy UV screen printing ink, Series 540 for indoors decoration of flat glass and metal surfaces.

Typical applications are slot machines, mirrors, glass furniture, metal cover plates and signs.

### Applications

- › Slot machines
- › Mirrors
- › Glass furniture
- › Metal cover plates
- › Signs

### Substrates

Substrate	Suitability	Hints
Glass	★★★★★	
Metal	★★★★★	

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

### Properties / Characteristics

Feature	Rating	Hints
Alcohol- and gasoline resistance	★★	To improve resistance: Series 500-GL (5 % by weight)
Resistance to adhesives	k. A.	
Block resistance	k. A.	
Flexibility	★★	
Gloss	★★★	Silky glossy
Resistance to hand sweat	★★★★	
Light fastness	★★★	See technical information: Light fastness
Abrasion resistance	★★★	
Pigmentation	★★★★★	
Sieve openness	k. A.	
Temperature resistance	★★★	
Curing	★★	High energy requirement
Moldability	k. A.	
Water resistance	k. A.	To improve resistance: Series 500-GL (5 % by weight)
Weather resistance	★★	

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

## Product Range

### MS Basic Colors

Article no.	Color	HP	HR	HT	HL	Article no.	Color	HP	HR	HT	HL
540-1005	MS light yellow	•				540-3305	MS magenta	•	•	•	•
540-1105	MS medium yellow	•			•	540-4005	MS violet	•	•	•	•
540-1205	MS dark yellow	•			•	540-5005	MS blue	•	•	•	•
540-2005	MS orange	•				540-6005	MS green	•	•	•	•
540-3005	MS red	•				540-8005	MS black	•	•	•	•
540-3105	MS magenta red	•		•	•	540-9005	MS white	•	•	•	•

HP High pigmented      HR Highly thermoresistant      HT Highly transparent      HL Highly lightfast

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

### Other Colors

<b>ST Metallics</b>	<a href="http://www.printcolor.ch/stcolorguide">www.printcolor.ch/stcolorguide</a> or ST Color Chart
<b>ST Neon Colors</b>	<a href="http://www.printcolor.ch/stcolorguide">www.printcolor.ch/stcolorguide</a> or ST Color Chart
<b>Glaze Colors</b>	Upon request
<b>Special Colors</b>	Pantone®, HKS, RAL and after customer sample
<b>Others</b>	Series 540-00      ST opaque white
	Series 540-04      Thixotropic paste
	Series 540-05      ST varnish
	Series 540-33      ST opaque black

## Additives

<b>Thinner</b>	Series 500-017	<b>Addition ratio</b>	Max. 5 % by weight
<b>Hardener</b>	Series 500-GL	<b>Addition ratio</b>	5 % by weight
<b>Adhesive</b>	Series 500-HV	<b>Addition ratio</b>	3–5 % by weight

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

## Processing

### Mesh

All commercially available polyester mesh from 150 up to 180 threads/cm can be used.

### Stencils

All commercially available stencils can be used.

### Curing

Curing of Series 540 depends on the layer thickness as well as on the substrate and the additives used.

Usual parameters are:

**UV Dryer**      The energy requirements for use of a mesh 150.31 (depending on the color shade) are 800–1000 mJ/cm<sup>2</sup> (Technigraf integrator) on a white substrate.

## Cleaning

Intermediate cleaning of stencils and squeegees should be done in a timely manner with Series 500-BRS. Final cleaning can be done with Series 500-URS.

## Special Features & Tips

**Multilayer Color buildup** Make sure that the first layers of a multilayer color buildup are cured with a max. of 70 % of the energy required.

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## Productivity

Depending on the color shade, a productivity of 75–95 m<sup>2</sup>/kg is to be expected with press-ready ink and use of a mesh 150.31.

## Others

**Delivery** 5 kg / 20 kg

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**Certificates / Standards** [www.printcolor.ch/certificates](http://www.printcolor.ch/certificates)

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**other** Stir well before use.

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Information on shelf life can be found on the cover label.

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## Basic Color Systems

- HP** Basic Color Mixing System with high pigmented basic colors.
- HR** Thermoresistant mixing colors with a heat resistance of 200°C/>30 minutes.
- HT** Highly transparent mixing colors for high glaze coloring.
- HL** High lightfast basic colors for long term outdoor applications.

## Safety Information

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

Issued on	Revision on	Edited by	Version
05/08/2015	01/02/2018	T21 / T06	3

## 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.