

Series 592

UV Screen Printing Ink for PVC and PC Cards

Unique UV curing screen printing ink for printing of PVC and polycarbonate card systems. The laminating process is supported in such way, that the ink is melting into the substrate and overlay. The UV

screen printing ink can be used with adhesive-free overlay made of PVC and PC. Typical applications are credit cards, ID cards, smartcards and loyalty cards.

Applications

- › Identity cards
- › Smartcards
- › Loyalty cards
- › Debit and credit cards

Substrates

Substrates	Suitability	Hints
Polycarbonate	★★★★★	
PVC (transparent and colored core)	★★★★★	
PET-G	★	

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

Characteristics

Feature	Rating	Hints
Laminatability	★★★★★	
Block resistance	★★★★	
Flexibility	★★★★★	
Overprintable with UV offset	★★★★★	
Light fastness	★★★★	After laminating, Depending on pigments
Sieve openness	★★★★★	
Temperature resistance	★★★★★	
Curing energy	★★★	
Steam resistance	★★★★★	After laminating

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

Product Range

			Mesh	mJ/cm ²
Metallics for Polycarbonate and PVC	Series 592-MSS1	Silver, small	90.48	400
	Series 592-MSM1	Silver, medium	90.48	400
	Series 592-MSM2	Silver, medium	77.55	400
	Series 592-MSM3	Silver, medium	90.48	400
	Series 592-MSM4	Silver, medium	90.48	400
	Series 592-MSL1	Silver, large	77.55	400
	Series 592-MSL2	Silver, large	90.48	400
	Series 592-MGS1	Gold, small	120.34	400
	Series 592-MGM1	Gold, medium	77.55	400
	Series 592-MGM2	Gold, medium	90.48	400
	Series 592-MGM3	Gold, medium	77.55	400
	Series 592-MGM4	Gold, medium	77.55	400
	Series 592-MGM5	Gold, medium	77.55	400
	Series 592-MGM6	Gold, medium	77.55	400
	Series 592-MGM7	Gold, medium	90.48	400
	Series 592-MGM8	Gold, medium	90.48	400
	Series 592-MGM9	Gold, medium	90.48	400
	Series 592-MGM10	Gold, medium	90.48	400
	Series 592-MGM11	Gold, medium	90.48	400
	Series 592-MGL1	Gold, large	90.48	400
	Series 592-MGL2	Gold, large	77.55	400
	Series 592-MGL3	Gold, large	77.55	400
	Series 592-MGL4	Gold, large	77.55	400
	Series 592-MGL5	Gold, large	77.55	400
	Series 592-MGL6	Gold, large	77.55	400
	Series 592-MGL7	Gold, large	77.55	400
	Series 592-MGL9	Gold, large	77.55	400
	Series 592-MPS1	Pearl, small	90.48	400
	Series 592-MPS2	Pearl, small	90.48	400
	Series 592-MPM1	Pearl, medium	90.48	400
	Series 592-MPL1	Pearl, large	43.80	400
	Series 592-MPL2	Pearl, large	77.55	400
	Series 592-MVS1	Blue with golden shimmer, fine	120.34	400
Series 592-MVS2	Red, small	120.34	400	
Series 592-MVM1	Orange, medium	77.55	400	
Series 592-MVM2	Orange, medium	77.55	400	
Series 592-MVM3	Violet with Pearl, medium	77.55	400	
Series 592-MVL1	Red, large	77.55	400	
	More metallics on request			
Others	Series 592-00/PC *	Laminating white for Polycarbonate	90.48	600
	Series 592-00/PVC *	Laminating white for PVC	120.34	300
	Series 592-00-PVC/LV *	Laminating white for PVC, semi-mat	120.34	200

Series 592-33/LV	Black	90.48	150
Series 592-05	Thermo-varnish / laminating adhesive	90.48	400
Series 592-07	Binder	90.48	400
Series 592-5700	UV Protection Varnish	90.48	400

* Please see "Special Features & Tips" on page 3 for important information on the scratch resistance of our opaque white inks.

Additives

Thinner	Series 592-017	Addition ratio	1 – 10 % by weight
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Hint: a complete overview of all available auxiliaries can be found in a separate technical data sheet.

Processing

Mesh

All common polyester mesh can be used.

Stencils

All common stencils can be used.

Curing

Curing conditions of the series depend on the color shade, the opacity as well as on the used substrate. Usual parameters are:

UV channel	See "Product Range"
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To verify your UV curing energy we highly recommend the usage of a professional UV integrator (e.g. Technigraf Integrator, article no. 54-05955).

Further processing

- › Laminating
- › Punching
- › Cutting
- › Concealing
- › Grooving
- › Molding / embossing
- › Folding

Cleaning

Intermediate cleaning of stencils and squeegees should promptly be done with Series 500-BRS. Final cleaning is best be done with Series 500-URS.

Special Features & Tips

Laminating high

UV offset surface coverage

By applying the laminating adhesive Series 592-05 to the offset ink, a high peel value with high UV offset surface coverage (over 20%) is achieved.

Even better results can be achieved with following procedures:

1. pre-printing with binder Series 592-07
2. offset printing
3. printing of laminating adhesive Series 592-05

Opaque white – scratch resistance after printing

Since our opaque white inks (e.g. Series 592-00/PVC) are thermoplastic, the high bonding strength develops during lamination. The ink film is scratch sensitive after printing. There-

fore, please do not scratch for testing. Please find further information on Printcolor's opaque white inks on the individual fact sheets.

Others

Delivery	1 kg / 5 kg / 20 kg
Certificates / Standards	www.printcolor.ch/certificates
Other	Stir well before use. Information on shelf life can be found on the cover label.

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
05/05/2015	17/09/2019	T30	9

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.