

Series 320

Fast Drying Solvent Based Screen Printing Ink for Plastics

Silky glossy and fast drying screen printing ink, Series 320, for high printing speed (i.e. cylinder printing). Optimal blog resistance for printing on sheet materials. The printing ink is forming a hard ink film. Series 320 is typically used for production of displays and display stands.

Point of Sale (POS)

Application

- > Displays
- > Display stands

Substrates

Substrate	Rating	Hints
Rigid PVC	****	
PET-G / PET-GAG	****	
Polystyrene (PS), mat	****	
Primered / coated foils	****	
Paper, cardboard	****	
PET-A	****	
Polycarbonate (PC)	****	
Acrylic glass (casted PMMA)	***	
Rigid PVC, foamed	***	
Polypropylene (PP), pre-treated	***	
Polystyrene (PS), glossy	***	
Plasticized PVC self-adhesive foils	***	

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Legend

 $\star \star \star \star \star$ Very well suited

Detailed pre-tests necessary



Characteristics

Feature	Rating	Hints
Alcohol- and gasoline resistance	**	
Resistance to adhesives	n/a	
Block resistance	****	
Flexibility	**	Use of Series 320-07/FLEX (max. 20%) will increase flexibility
Gloss	***	Silky glossy
Resistance to hand sweat	***	
Light fastness	***	See technical information: light fastness
Abrasion resistance	***	
Pigmentation	****	Exception: easyMIX system
Screen openness	****	
Temperature resistance	****	
Drying	****	
Moldability	****	
Weather resistance	***	

Legend

- ******** Very good product properties
 - Product properties not available

No information available

n/a

Product Range

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MS Basic Colors

Article	Color	HP	Article	Color	HP	
320-1000	MS light yellow	•	320-3300	MS magenta	•	
320-1100	MS medium yellow	•	320-4000	MS violet	•	
320-1200	MS dark yellow	•	320-5000	MS blue	•	
320-2000	MS orange	•	320-6000	MS green	•	
320-3000	MS red	•	320-7000	MS brown	•	
320-3100	MS magenta red	•	320-8000	MS black	•	
320-3200	MS dark red	•	320-9000	MS white	•	

HP High pigmented

Note I: The MS-basic inks must be processed in combination with the corresponding binder Series 320-07 (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

ST Colors	ST Color Chart / <u>www.printcolor.ch/stcolorguide</u>		
ST Metallics	ST Color Chart / <u>www.printcolor.ch/stcolorguide</u>		
ST Neon Colors	ST Color Chart / <u>www.printcolor.ch/stcolorguide</u>		
ST Process Colors	See technical informati	ion: Process Colors	
Special Colors	Pantone [®] , HKS, RAL an	id after customer sample	
easyMIX	Series 320-EM/1007 EM light yellow		
Note: Reasonably priced color	Series 320-EM/1207	EM dark yellow	
mixing system with limited opacity. No addition of binder.	Series 320-EM/2007	EM orange	
	Series 320-EM/3207	EM dark red	
	Series 320-EM/4007	EM violet	
	Series 320-EM/5007	EM blue	
	Series 320-EM/6007	EM green	
	Series 320-EM/8007	EM black	
	Series 320-EM/9007	EM white	
UV Luminescent Colors	Series 320-UL09/05	UV luminescent ink, yellow	
	Series 320-UL16/05	UV luminescent ink, red	
	Series 320-UL26/05	UV luminescent ink, blue	
	Series 320-UL30/05	UV luminescent ink, green	
Others	Series 320-00	ST white	
	Series 320-00/M	Mat paste	
	Series 320-03	Abrasion resistant additive (increasing blog resistance)	
	Series 320-04	Transparent paste	
	Series 320-05	Varnish	
	Series 320-06	Retarder	
	Series 320-07	Binder	
	Series 320-33	ST black	

Auxiliaries

Thinner	Series 300-017	Addition ratio	15 - 30% by weight
Thinner for process colors	Series 300-017/ISO	Addition ratio	15 - 30% by weight
Retarder	Series 300-018	Addition ratio	Max. 20% by weight
Retarder for process colors	Series 300-018/ISO	Addition ratio	Max. 15% by weight
Accelerator	Series 300-019	Addition ratio	15 - 30% by weight

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

Processing

Mesh

All commercially available mesh can be used.

Stencils

All commercially available and solvent resistant stencils can be used.



Drying

Drying of series 320 depends on the layer thickness as well as on the substrate and the auxiliaries used.

Usual parameters (without addition of retarder):

Air	Physically very fast drying. Overprintable after 5 minutes at 20°C ambient temperature / 50% relative humidity.
Dryer	Depending in dryer performance the prints are stackable after 20-40 seconds. The recommended drying temperature is 40-60°C.

Further Processing

- > Punching
- Cutting
- › Laminating
- › Grooving

Molding

- Thermal forming
- Folding

Cleaning

Stencils and squeegees should be cleaned with Series 300-URS or Series 300-BRS in a timely manner.

Special Features & Tips

Mixing system (MS)	MS ink series 320 (80% by weight) + binder series 320-07 (20% by weight)
Mixing system (MS) for PP	MS ink series 320 (70% by weight) + binder series 320-07/PP (30% by weight)
Mixing system (MS) for PET-G, -A	MS ink series 320 (80% by weight) + binder series 320-07/PET (20% by weight)
Mixing system (MS) flexible	MS ink series 320 (80% by weight) + binder series 320-07/FLEX (20% by weight)
easyMIX (EM)	Reasonably priced color mixing system with a limited opacity. No addition of binder.

Productivity

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

Others

Delivery	1 kg / 5 kg / 25 kg
Certificates / standards	www.printcolor.ch/certificates
Other	Stir well before use.
	Information on shelf life can be found on the cover label.



Basisfarbsysteme

HP Basic mixing system with highly pigmented primary 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 for 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.