TECHNICAL DATA SHEET



Series 386

Thermo formable, solvent based Screen Printing Ink for Plastics

Glossy and high pigmented screen printing ink, Series 386, based on highly resistant raw materials for printing on various plastic materials. The printed ink films are extremely well thermo formable. Typical applications are displays for illuminated signs, technical films, signs and other 3D objects.

Application

- > Illuminated signs
- Signs

- > Technical films
- 3D objects

Substrates

Substrate	Rating	Hints
Acrylic glass (casted PMMA)	****	
Coated surfaces / powder coatings	****	
Composite materials	****	
Polycarbonate (PC)	****	
Polyester, primered	****	
Soft PVC self-adhesive foils	****	
ABS, SAN, copolymers	***	
Folien geprimert / beschichtet	***	
Rigid PVC	***	
Paper, cardboard	**	

Legend ★★★★ Very well suited

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Detailed pre-tests necessary

Note: A detailed overview of all substrates of product group 300 can be found here: www.printcolor.ch/bedruckstoffe





Characteristics

Feature	Rating	Hints
Alcohol- and gasoline resistance	***	Use of Series 600-HDA (5-10 %) to further improve resistance.
Resistance to adhesives	***	
Block resistance	***	
Flexibility	****	
Gloss	****	Glossy
Resistance to hand sweat	****	
Light fastness	****	See technical information: light fastness
Abrasion resistance	****	
Pigmentation	****	
Screen openness	***	
Temperature resistance	***	
Drying	***	
Moldability	****	
Weather resistance	****	

Legend

- $\star \star \star \star \star$ Very good product properties
 - Product properties not available
- No information available

Product Range

MS Basic Colors

Article	Color	HP	HR	HT	HL	Article	Color	HP	HR	HT	HL
388-1000	MS light yellow	•				388-3100	MS magenta red	•		•	
388-1010	MS yellow		•			388-3150	MS medium red		•	•	
388-1020	MS real yellow		•			388-3200	MS dark red	•	•	•	
388-1050	MS pure yellow			•		388-3300	MS magenta	•	•	•	
388-1100	MS medium yellow	•		•		388-4000	MS violet	•	•	•	
388-1200	MS dark yellow	•				388-4500	MS dark blue		•	•	
388-1300	MS yellow orange		•	•		388-5000	MS blue	•	•	•	
388-2000	MS orange	•				388-6000	MS green	•	•	•	
388-2100	MS pure orange		•	•		388-7000	MS brown	•		•	
388-2500	MS orange red			•		388-8000	MS black	•	•	•	
388-3000	MS red	•				388-9000	MS white	•	•	•	
388-3050	MS light red		•								

HP High pigmented

HT

HL High lightfast

n/a

Note I: The MS-basic inks must be processed in combination with the corresponding binder Series 386-07 (min. 20 up to 30% by weight).

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

High transparent





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.</u>	printcolor.ch/stcolorguide			
ST Process Inks	See technical information: Process Inks				
Special Colors	Pantone $^{ extsf{B}}$, HKS, RAL and after customers sample				
Others	Series 386-00	ST white			
	Series 386-00/M	Mat paste			
	Series 386-04	ST transparent paste			
	Series 386-05	ST varnish			
	Series 386-05/MT ST varnish, mat				
	Series 386-06	Retarder paste			
	Series 386-07	Binder, glossy			
	Series 386-33 ST black				
	Series 386-5700 Photoprotective varnish				

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 polyester can be used.

Stencils

All commercially available and solvent resistant stencils can be used.

Drying

Drying of Series 386 depends on the layer thickness as well as on the substrate and the auxiliaries used.

Usual parameters (without addition of retarder):

Air	Physically fast drying at 20°C ambient temperature / 50% relative humidity. Overprintable after 5-10 minutes.
Continuous dryer	Depending on dryer capacity, the print is stackable after 30-60 seconds. The recommended drying temperature lies between 40-60°C.

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Further Processing

- > Punching
- Cutting
- > Laminating
- > Grooving

Cleaning

Stencils and squeegees should timely be leaned with the products Series 300-URS or Series 300-BRS.

Special Features & Tips

Mixing system (MS) MS ink Series 388 + Binder Series 386-07 (min. 20 % by weight)

Productivity

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

Others

Delivery	1 kg / 5 kg / 25 kg
Certificates / Standards	www.printcolor.ch/certificates
Third party applications	Addition: always 30% binder
	Roll and spray applications: thinner Series 300-743
	Spray applications: thinner Series 300-377 (regulated addition)
Other	Stir well before use
	Information on shelf life can be found on the cover label.

Basic Color Systems

- **HP** Basic mixing system with highly pigmented primary colors
- HT Highly transparent combination colors for high glaze coloring.

HL High light fast color for long-term outdoor use.

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.

- Molding / coining
- > Thermal forming
- › Folding