

Series 630

2-C Solvent Based Screen Printing ink for Glass, Metal and Duroplasts

Silky glossy and highly resistant screen printing ink, Series 630 for printing on glass, various metals and Duroplasts. Typical application is glass decoration.

Application

- › Decorative glass
- › Mirrors
- › Flat glass
- › Ceramics

Substrates

Substrate	Rating	Hints
Glass / ceramic	★★★★★	
Metal	★★★★★	
Polyamide (PA), pre-treated	★★★★★	
Polyoxymethylene (POM)	★★★★★	
ABS, SAN	★★★★	
Duroplasts	★★★★	
Coated surfaces / powder coatings	★★★★	
Polyethylene (PE), pre-treated	★★★★	
Polypropylene (PP), pre-treated	★★★★	
Wood, uncoated	★★★	

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

Note: A full overview of substrates of series 600 can be found here: www.printcolor.ch/substrates

Properties / Characteristics

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

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

Product Range

MS Basic Colors

Article	Color	HP	Article	Color	HP
630-1000	MS light yellow	•	630-3300	MS magenta	•
630-1100	MS medium yellow	•	630-4000	MS violet	•
630-1200	MS dark yellow	•	630-5000	MS blue	•
630-2000	MS orange	•	630-6000	MS green	•
630-3000	MS red	•	630-7000	MS brown	•
630-3100	MS magenta red	•	630-8000	MS black	•
630-3200	MS dark red	•	630-9000	MS white	•

HP Highly pigmented

Note I: 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 / www.printcolor.ch/stcolorguide	
ST Metallics	ST Color Chart / www.printcolor.ch/stcolorguide	
ST Neon Colors	ST Color Chart / www.printcolor.ch/stcolorguide	
Special Colors	Pantone®, HKS, RAL and after customer sample	
Others	Series 630-00	ST white
	Series 630-04	Thixotropic paste
	Series 630-05	Varnish
	Series 630-05/MT	Varnish, mat
	Series 630-06	Retarder paste
	Series 630-07	Binder
	Series 630-33	ST black
Effect colors	Series 630-07/03	Sandblast imitation
	Series 630-07/04	Etch imitation

Auxiliaries

Thinner	Series 600-017	Addition ratio	10 – 20% by weight
Retarder	Series 600-018	Addition ratio	5 – 15% by weight

Hardener

	Series 600-GL	Series 600-HDI	
Application	Glass / ceramic / Non-ferrous metals	Duroplasts / Aluminum / sheet metal	
Addition ratio	20:1	4:1	
Reactivity	Medium reactivity from 20°C	Medium reactivity from 15°C	
Resistance to chemicals	Very good	Very good	
Outdoor resistance	Limited	Not recommended	

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

Processing

Cliché

All commercially available clichés can be used.

Stencils

All commercially available and solvent resistant stencils can be used.

Curing

Drying of Series 630 depends on the layer thickness, the substrates as well as on the auxiliaries used.

Usual parameters (no addition of retarder):

Air	Physically fast drying
Oven (recommended)	80°C / 60 minutes up to 140°C / 20 minutes

Curing

Curing of the ink systems is depending on the temperature, the used hardeners and the layer thickness. A minimum temperature (see point "hardener") over a period of 5 to 10 days must be guaranteed to reach maximum resistance. By increasing temperature, the ink film cures more quickly and chemical resistance is reached sooner and higher.

Curing times

Series 600-GL	5-7 days (at minimum temperature)
Series 600-HDI	5-7 days (at minimum temperature)
Forced drying	From 20 minutes at 140°C up to 60 minutes at 80°C

It is important to ensure, that temperatures do not fall below within the first 48 hours. An increased moisture supply during drying time can permanently damage the ink film.

Pot life

MS colors and its blends have a pot life of 4-8 hours, depending from the hardeners used and depending on environmental conditions. Significantly shortened pot life has to be encountered with metallic colors.

Overprintability

Prior to complete curing of the ink.

Further Processing

- › After preliminary tests

Cleaning

Intermediate cleaning of stencils and squeegees should be done in a timely manner with Series 600-BRS. Final cleaning can be done with Series 600-URS.

Special Features & Tips

Dishwasher resistance	To increase the dishwasher resistance we recommend forced drying at 140°C for 20 minutes.
Outdoor resistance	The used binder system only permits a limited outdoor resistance.

Productivity

Depending on the color shade, a productivity of 45-65 m²/kg is to be expected with press-ready ink and use of a mesh 120.34.

Others

Delivery	1 kg / 5 kg / 25 kg
Certificates / Standards	www.printcolor.ch/certificate
Others	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 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.