

Product Range

MS Basic Colors

Article no.	Color	HP	HT		Article no.	Color	HP	HT		
544-1015	MS yellow	•	•		544-3305	MS magenta	•	•		
544-1105	MS medium yellow	•			544-4005	MS violet	•	•		
544-1205	MS dark yellow	•			544-5005	MS blue	•	•		
544-1305	MS yellow-orange	•	•		544-6005	MS green	•	•		
544-2105	MS orange	•			544-8005	MS black	•			
544-3005	MS red	•			544-9005	MS white	•			
544-3055	MS light red	•	•							

HP High pigmented **HT** High transparent

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

Other Colors

Special Colors	Pantone [®] , HKS, RAL, and after customer sample	
Others	Series 544-07	ST binder
	Series 544-00	ST opaque white
	Series 544-05/847	Varnish high transparent, silicone-free (see "Special Features" chapter)
	Series 544-33/HD	High opaque black

Auxiliaries

Thinner	Series 500-017	Addition ratio	1-10 % by weight (if necessary)
Hardener mixture	Series 700-GL: 60 % + Series 10-02459: 40 %	Addition ratio of the mixture	10 % by weight
		Reactivity of the hardener	Medium reactivity from 20 °C

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

Processing

Pre-flame treatment

A simple pre-flame treatment with a customary gas is recommended.

Tempering

Tempering is not necessary.

Mesh

Any commercially available polyester mesh of 150 to 120 threads/cm can be used. A mesh with 140 threads/cm is usually used.

Stencils

Any commercially available stencils can be used.

Curing

Cross-linking of the ink system depends on the UV energy, temperature, and layer thickness. A minimum temperature (see “Hardener” section) over a period of 3 days is required to develop good resistance. By increasing the temperature, the ink film will cure more quickly, and chemical resistance will be achieved sooner and be higher.

Usual parameters are:

Hardener & UV channel	Addition ratio of the hardener mixture (see “Auxiliaries” chapter) of 10 percent by weight. Depending on the color, the energy requirement when using a 140.34 mesh is approximately 600 mJ/cm ² (Technigraf Integrator) on a neutral/white substrate.
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Pot lives

With the hardener mixture (see “Auxiliaries” chapter), the pot life for MS colors and their mixtures is three to four hours, depending on the ambient conditions. The pot life is significantly shorter when only using the Series 700-GL hardener (without hardener mixture).

Cleaning

The stencils and squeegees should be cleaned promptly with Series 500-URS.

Special Features & Tips

Series 544-05/847 Highly transparent, silicone-free varnish	Series 544-05/847 is a highly transparent, silicone-free varnish that was developed to be printed directly onto glass. It serves as a primer for a flawless, brilliant appearance after applying stamping foils. Series 544-05/847 is not suitable as an overprint varnish of Series 544 due to wetting problems.
Changing the hardener mixture for higher resistance	To achieve excellent resistance under difficult conditions, the ratio of the hardener mixture can vary from 60% 700-GL / 40% 10-02459 to 70% 700-GL / 30% 10-02459. This shortens the pot life.
Series 500-050	To achieve excellent resistance under difficult conditions, 1 percent to 5 percent of the Series 500-050 UV reactivity additive can be added in addition to the changed hardener mixture (see above).
Maximum resistance thanks to pre-flame treatment and post-treatment	Maximum resistance is achieved thanks to a silanizing pre-flame treatment with Pyrosil MGK and subsequent post-treatment for 60 minutes at 150 °C.

Productivity

Depending on the color, a yield of 60–85 m²/kg can be expected with the ink set to be ready for printing when using a 140.34 mesh.

Others

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

Basic Color Systems

- HP** Basic Color Mixing System with high pigmented basic colors.
- HT** Highly transparent mixing colors for high glaze coloring.

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
21.05.2021	19.08.2022	T09 / T12/ T32	2

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.