

Ink for roll- and spray application

SERIES 800

High resistant, elastic ink system for decoration of tarpaulin

This high opaque and glossy ink system based on high resistant raw materials was developed for the application on tarpaulin or banners for indoor or outdoor use.

Substrates

The range of possible substrates covers different plastics i.e. rigid and flexible PVC, coated polyolefin fabrics, and other materials.

Due to the meanwhile very wide range of available plastic films, their various modifications, the common incorporation of co-polymers and recycling components, we strongly recommend pre-production trials to confirm the suitability of the varnish in terms of film performance and adhesion.

Application

Area of application is a wide range of different plastics in the promotion and display segment, application for outdoor use like vehicle tarpaulins. Because of plasticizers in the material tests have to be done in any case. When the material is getting older and therefore shows fluctuations on different areas it may cause a negative influence on long term applications between the substrate and the ink.

The quality raw materials used make series 800 suitable for external use or where greater mechanical and chemical resistance is needed when used together with hardeners (e.g. series 600-HDA or series 600 HDR (external) or 600-HDI (internal)) at approx. 10% by weight.

Hardener adhesive agent can cause "chapping" in extreme cases and a worsening of adhesion as a consequence.

Properties and Handling

Before use the inks have to be thinned down to application viscosity by using the special thinner series 800-743. Normally the amount of thinner needed is around 30-45%. The thinner should be added in steps to avoid effects like flocculation of the binder. This mix is suitable for application by brush or roll. The recommended solvents guarantee fast drying of the printed substrate and good adhesion on basic material. The temperature of application should not be below 18 °C.

Additives

Series 800 should give consistency of print when using between 40-45% standard thinner Series

800-743. For more extreme conditions please refer to the technical leaflet "Additives program product group 300". Please note that any addition will change the properties of the product.

Colour shades

Ink series 800 is heavy metal free (Euronorm 71, part 3), monopigmented and are following modified the MS-colour mixing system.

Colours available:

| | |
|-----------------|-----------------------|
| Series 800-1050 | Lemon yellow |
| Series 800-1100 | Yellow (light) |
| Series 800-1200 | Yellow (reddish) |
| Series 800-1900 | Orange transparent |
| Series 800-2500 | Red (yellowish) |
| Series 800-3100 | Red, transparent |
| Series 800-3200 | Dark red, transparent |
| Series 800-3300 | Magenta, transparent |
| Series 800-4000 | Violet, transparent |
| Series 800-5000 | Blue, transparent |
| Series 800-6000 | Green, transparent |
| Series 800-7000 | Red / brown |
| Series 800-8000 | Black |
| Series 800-9000 | White |

The transparent inks are suitable for colour adjustment whilst keeping brilliance of colour matches and are also suitable for tinting with metallic pigments.

Standard inks according to colour range ST

31 bright shades (shade 08-38)

9 fluorescent colours (shades 40-50)

In addition to the standard inks the following high opaque inks are available:

| | |
|---------------|-------|
| Series 800-00 | White |
| Series 800-33 | Black |

The following matt inks are standard to the range and the other basic colours can be made in matt on request:

Series 800-00/MT White, matt
Series 800-33/MT Black, matt

disposal (wastekey 55509 in Germany, special waste X (1640) Switzerland)

Metallics:

Series 800-100 Silver (rub proof)
Series 800-101 Britannia silver
Series 800-102 Light gold
Series 800-103 Middle gold
Series 800-105 Rich gold
Series 800-106 Copper

Various inks can be made to customer specification; these include metal-free bronze as well as the ST recipes.

Series 800-200 Pearl gloss silver
Series 800-02299 coarse silver

All RAL-Shades are offered as standard for roll and brush application.

To expand the special uses there are also different standard lacquers to choose from

Series 800-05 Gloss lacquer
Series 800.05/MT Matt lacquer

If the inks in series 800 are for exterior use we recommend overprinting with a special lacquer from the series 800-5700 for best non-fade properties. Using this combination give unsurpassed results for a solvent based one component system.

All the above colours conform to EN71, Part 3 (safety of toys, migrations of various elements) and are heavy metal free. The inks all have a blue wool rating of 6-8 (DIN 16525) with the exception of fluorescent inks. Care should be taken with white or clear lacquer discolouration under strong lighting conditions.

Drying

The solvent composition of the thinner should give consistency of print. Accelerated drying can be achieved using hot air jets or infra- red.

Cleaning

The series 800 can be cleaned down with most usual solvent based cleaners but Printcolor AG recommend universal cleaner series 300-URS or series 300-BRS.

Storage

Under normal storage conditions (low temperature changes 20-35°C, humidity 20-70%) the ink can be stored for up to 2 years (6 months for metallic inks) without deterioration of ink properties.

Packaging

Available in standard 1kg and 5kg polyethylene tubs that are suitable for re-cycling after removal of ink remnants. The un-hardened ink requires special waste

Precautionary measures

Read material safety data sheet prior to processing. The material safety data sheets according to OSHA form contain indication of hazardous ingredients, TLV-level and instructions for precautions when processing, handling and storing as well as first aid. The information given in the MSDS refers to processing as described in this technical leaflet. The statements in our leaflets have been made to the best of our knowledge and are given without any obligation. They serve to advise our business associates, **but it is absolutely necessary** to make your own printing tests under local conditions, with regard to the intended purpose prior to starting the printing job. In case of any doubts please contact our technical advisors. The application, use and processing of the products delivered by us are beyond our control. This is subject to your responsibility and there is no liability or guarantee on our part. In case of justified complaints the manufacturer can only be made liable for the countervalue of the used ink system. Addition of not mentioned products or competitors products are on your own risk and releases Printcolor Screen Ltd. of any later demands, especially in cases of damage and loss caused by alien products. All former leaflets are no longer valid.

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