

Screen printing ink

SERIES 386

Universal PVC and plastic screen printing ink for technical and graphic applications

A silky finish ink based on series 388 in combination with the binder component series 386-07 giving good coverage and mileage, suitable for interior or external use for many graphic and industrial applications on various man-made substrates. Specially suitable for Acrylic glass (PMMA).

Suitable for a wide range of substrates such as rigid and flexible PVC, coated polyester & polycarbonate, pre-treated polyolefines (PE/PP), many lacquered & coated surfaces such as celluloseacetate & CAB, paper and boxboard. Suits very well for Acrylics like Acrylic glass (PMMA). With use of thinners series 10-0330 good adhesion will be obtained on polystyrene and its derivatives (ABS & SAN).

Because of the diverse range of material compositions it is imperative that the printer carries out trials to establish ink suitability.

Uses

Suitable for most point-of-sale and industrial uses on labels and stickers, keyboards, automotive, signprinting and printing onto reflective materials as well as many applications in the automotive industry.

The quality raw materials used make series 386 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

Based on the MS basic inks of series 388 in addition with 20% (by weight) of series 386-07 you will get the finished ink series 386.

The ink has been developed to give excellent flow and stay open characteristics ensuring high quality printing of both line and fine copy details. The standard flow characteristics make this screen ink suitable for both flatbed and cylinder printing machines.

The recommended solvent guarantees stay open and self solvency of inks as well as quick drying of printed substrates.

Additives

For optimum printing 10-20% (by weight) of universal thinners series 300-017 should give consistency of print

and good working viscosity under normal circumstances. Rotary printing require thinning with series 300-019 at approx. 20-30% by weight. For more extreme conditions please refer to the technical leaflet "Additives programme product group 300".

Care should be taken when using additives to ensure that stability is not compromised.

Colour shades

The 388 and 386 ink series are heavy metal free (Eu-norm 71, part 3), monopigmented and suitable for matching to MS-colour mixing system.

Colours available:

388 – 1000	Lemon yellow
388 – 1100	Yellow (light)
388 – 1200	Yellow (reddish)
388 – 2000	Orange
388 – 3000	Carnation red
388 – 3100	Transparent red
388 – 3200	Transparent dark red
388 – 3300	Transparent magenta
388 – 4000	Transparent violet
388 – 5000	Transparent blue
388 – 6000	Transparent green
388 – 7000	Red / brown
388 – 8000	Mixing black
388 – 9000	Mixing white
388 – 0900	Ultramarine (non-fade properties)

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

For maximum mechanical & chemical resistance a blend of at least 20% by weight of binder 386-07 (OR -06, -05, -07) should be used.

Standard inks according to colour range ST
31 brightshades (shade 08-38)
9 fluorescent colours (shades 40-47)

Metallics:

386 - 100	Silver (rub proof)
386 - 101	Britannia silver
386 - 102	Light gold
386 - 103	Middle gold
386 - 105	Rich gold
386 - 106	Copper

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

386 – 200 Pearl gloss silver
386 – 02299 Course silver

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

386 – 8000/MT matt black
386 – 9000/MT matt white

Trichromatic colours:

386 – 0950 Cyan
386 – 0960 Yellow
386 – 0970 Magenta
386 – 0980 Deep black

And blending pastes:

386 – 04 Extender base
386 – 06 Retarder Gel
386 – 07 Binder paste

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

386 – 05 gloss lacquer
386 – 05/MT Matt lacquer

If the inks in series 386 are for exterior use we recommend overprinting with a special lacquer from the series 386 – 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 and ultramarine in the MS-Colour-system 0900 and care should be taken with white or clear lacquer discolouration under strong lighting conditions.

Drying

The solvent composition of universal thinner series 300-017 is specially formulated to stay open in the screen so retarders are not usually necessary, the ink still has quick drying properties, accelerated drying can be achieved using hot air jets or infra-red.

Meshes

The 386 series is suitable for use with all usual meshes and capillary films.

Cleaning

The 387 series 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 disposal (wastekey 55509 in Germany, special waste X (1640) Switzerland)

MS – BASIC COLOURMATCH SYSTEM

Based on the MS base colours series 388 you can compile the following ink order

Series 388

MS-Series 388 + 20% of weight Series 388-07

Series 384 (previously Series 284!)

MS-Series 388 + 20% of weight Series 384-07

Series 386 (Previously Series 120!)

MS-Series 388 + 20% of weight Series 386-07

Series 387 (Previously Series 84!)

MS-Series 388 + 20% of weight Series 387-07

Series 395 (Previously Series 9500!)

MS-Series 388 + 20% of weight Series 395-07

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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