

TECHNICAL DATA SHEET

Pad Printing Ink Type TM/UV

TM-UV is a high gloss Single Component pad printing ink for decorating plastics, coated substrates, and some metals. TM/UV is a highly opaque, UV curable pad printing ink which is easy to use and is designed for demanding industrial applications that require high level chemical & abrasion resistance. Applications include electronics, automotive, medical devices, appliance panels, power tools, children's toys, and golf balls. The TM-UV ink system combines the advantage of fast UV curing technology with properties exhibiting extremely high resistance. This ink is similar or better than the top performing 2 component ink systems.

Characteristics

Single Component (No hardener used)

Prints Easily

Instant UV Ink Curing

Printed Parts can be mechanically handled after curing without worry of ink failure

High Gloss, Highly Opaque

Chemicals including alcohol, Mechanical Wear, Water and Weather Resistant

Light Fastness 6-8 according to the wool scale (DIN 16525)

Recommended printing room temperature 70-78 degrees F.

Recommended printing room humidity 30-50%

Drying & Curing

Expose to a medium pressure mercury vapor type lamp operating at a minimum of 200W per inch input power. Curing should be between 1000 and 2000 mJ/cm². The ink is 95% cured after exposure and 100% cured after 24 hours.

Single Component Use

Thinner if needed should be mixed with the ink prior to printing. During printing the ink may be thinned to maintain an optimal viscosity.

Shelf Life

Non Metallic 1 Year, Metallic 6 months, Thinners and additives 2 years.

Note: Shelf life is for products in the original sealed container stored 60 to 80 degrees F.

Thinners **Initially added 1 to 20% by weight depending on application 15% is Normal**

TM-C Fast Thinner

TM-B Normal Speed Thinner

TM-VD Slow speed Thinner

Additives

TM-PP Substrate Wipe-On Substrate Primer for ink adhesion

TM-ASP Ink Anti Static Paste Only used for static charge problems 1 to 2% by weight

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Cleaning Tampomark's R1 Parts Cleaner is recommended to clean ink from printing accessories.

Standard Ink Colors See our [Standard Ink Color Chart](#) at www.tampomark.us

20 Standard Colors

HD01 Black, HD02 White, HD03 Light Yellow, HD04 Medium Yellow, HD05 Yellow Orange, HD06 Orange, HD07 Ochre Yellow, HD08 Light Red, HD09 Bright Red, HD10 Carmine Red, HD11 Dark Red, HD12 Magenta, HD13 Light Blue, HD14 Medium Blue, HD15 Ultra Blue, HD16 Turquoise, HD17 Grass Green, HD18 Signal Green, HD19 Chestnut Brown, HD20 Clear Bronze Binder.

13 Color Matching System Make your own custom color ink in house using recommended formulas.

MS01 Black, MS02 White, MS03 Light Yellow, MS04 Medium Yellow-Transparent, MS05 Dark Yellow, MS06 Orange, MS07 Red, MS08 Red-Transparent, MS-9 Magenta-Transparent, MS10 Violet-Transparent, MS11 Cobalt Blue, MS12 Blue-Transparent, MS13 Green-Transparent

4 Color Process Colors

4C50 Cyan, 4C60 Yellow, 4C70 Magenta, 4C80 Black

6 Standard Metallic Colors

G02 Light Gold, G03 Medium Gold, C04 Copper Gold, S00 Silver, S99 Coarse Silver, S01 Champaign Silver

Custom Colors

An unlimited number of custom colors are available including Metallic and other special effect pigments.

Tampomark's Inks and additives conform to:

- Proposition 65 chemicals list (March 21, 2008)
- US C.O.N.E.G. Legislation and European Standard EN71, part 3 Safety of Toys (1989)
- Automotive, Medical, MIL-STD

Recommended Printing Substrates

Thermoplastics

ABS, Nylon, PET, PMMA, Polycarbonate, Polypropylene and Polyethylene with Pre-Treatment, Polyamide, Polystyrene, SAN, Soft and Rigid PVC, Styrene

Metals

Various metals

x pad printing machines

x pad printing accessories

TAMPOMARK
Made by MSG

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Miscellaneous Substrates

Lacquered and Coated surfaces

Precautionary Measures

Read Material Safety Data Sheet (MSDS) prior to processing.

The material safety data sheets according to OSHA contain hazardous ingredients, TLV levels, and instructions for precautions when processing, handling and storing as well as first aid. The statements in our leaflets have been made to the best of our knowledge and are given without any obligation. It is absolutely necessary to make your own printing tests under conditions, with regard to the intended purpose prior to starting the printing job. In case of any doubts please contact our technical specialists. Media Service Grulms GmbH cannot guarantee printing results nor assume liability for any problem that may arise. No warranty for results obtained, expressed, or implied can be assumed by Media Service Grulms GmbH. Rev. 1 2008

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