

# Pad Printing Ink

## Type UVE

### Ink Data Sheet

**NOTE:** Read Material Safety Data Sheet (MSDS) Prior To Use

**Ink Type UVE** is supplied in a liquid form. The ink is formulated for sealed ink cup systems. Recommended plate depth for pad printing is 25 microns. The ink has a printable range between 18 to 28 microns, depending on application. The ink can be applied single or double hit. If applying double hit adding clear binder to the ink may be advisable for maximum curing.

The ink viscosity is ready to use out of the container. The ink may be adjusted with thinner as needed. Slow thinner may be added to slow drying rate during printing (normally for high room temperatures or multi-color use).

**CAUTION:** UV ink is light-reactive. Avoid long term direct exposure to UV light when using. Yellow Plexiglas machine guarding is advised. Recommended room temperature 70-78 degrees F. Recommended room humidity 30-50 %

#### **ADDITIVES:**

##### **Thinners:**

SPECIAL UV THINNER #700299 use as needed (fast)

#### **DRYING & CURING:**

**Ink TYPE UVE** dries to the touch within 15-30 seconds at room temperature.

**PREHEAT:** Ink performance may be increased with IR treatment immediately before UV light curing. Exposure to 71C (160 degrees F)

for 2 – 4 seconds within 10 seconds prior to UV cure.

#### **UV LIGHT CURING:**

- UV Exposure: Expose to a medium pressure, Mercury vapor type lamp operating at a minimum of 200W per inch input power.

- Minimum Required Intensities:

  - 40mW /cm<sup>2</sup> @ 254 nm

  - 150mW /cm<sup>2</sup> @ 365 nm

- Minimum Exposure Energy:

  - 1.6 joules / cm<sup>2</sup> measured with a 320 nm – 390 nm UV radiometer

  - ( For increased wear resistance, up to 3 joules may be used).

- Irradiation Time: Requires under 5 seconds (depending on application).

- Conveyor speed: should be 4 – 12 feet / minute ( depending on application and thickness of ink).

#### **USE & STORAGE INFORMATION**

(For more detailed information see Material Safety Data Sheet (MSDS) for **Type UVE Ink**.)

##### **Ink Type UVE:**

Stir ink thoroughly before removing from container. Reseal lid tightly after using.

Warranty Period: 6 months from ship date (in original sealed container )

**THINNER:** Reseal lid tightly after using. Warranty Period: 2 Years from ship date (in original sealed container)

**SPECIAL ADDITIVES:** Reseal lid tightly after using. Warranty Period: 2 Years from ship date (in original sealed container)

**STORAGE OF ALL PRODUCTS:** At room temperature 60 to 80 Degrees F with low humidity.

# Pad Printing Ink Type UVE Ink Data Sheet

## Recommended Printing Substrates:

# : Indicates substrate may require pretreatment.

### THERMOPLASTICS

Polymethyl Methacrylate

Polyamides #

Polycarbonate

Polyvinyl Chloride Rigid

### THERMOSET

Polyurethane, Rigid #

### METALS

Aluminum

Copper

Stainless Steel

Tin

Miscellaneous Metals

### MISCELLANEOUS SUBSTRATES

Ceramic

### COATINGS & PAINTS

Urethane Paint / Coating

Miscellaneous Coatings & Paints

### OTHERS

Acrylic Sheets & Molding Powders

### AVAILABLE COLORS:

**Ink Type UVE** is available in:

- black, white, citron yellow, light red, bright red, carmine red, light blue, ultra blue, light green, medium gold, silver.
- Custom Colors Available Upon Request
- Clear Hardcoat in matte and gloss finishes available

**\*\*Since operating conditions and applications are beyond our control, Trans Tech can not guarantee results, nor assume liability for any problem that may arise.**

**The user should test the suitability of the product for its intended application. No warranty for results obtained, expressed or implied, can be assumed by Trans Tech.**



#### Trusted Partner for Your Product Decorating Needs

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