

## **Ink Technical Data Sheet - 417**

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Ink type **417** is a glossy, two-component, opaque, fast drying ink formulation. When fully cured, it provides outstanding resistance to: Abrasion / Chemicals / Diluted Acids / Diluted Alkalis / Mechanical wear / Oil & Grease / Organic Solvents / Perspiration / Product Contents. (See back side of sheet for recommended substrates)

### **Use Instructions**

**\*Read Material Safety Data Sheets Prior To Using\***

Ink type **417** is a two-component product supplied in paste form. Hardener must be added for production use. Ink and hardener should be thoroughly mixed prior to adding thinner. During use, the ink viscosity may be adjusted with thinner (as needed). A retarder may be added to slow drying rate during printing. (Required for high room temperatures or multi-color use) Under most conditions, ink pot life will not exceed 8 hours. Recommended room temperature: 70-78 degrees F. Recommended room humidity: 30-50 %

### **Additives**

**\*See Additives Chart for More Listings\***

**Hardener:** BH/N HARDENER 4:1 Ratio by weight

<b>Thinner:</b> THINNER B	5 To 20 % by weight	Faster
VD THINNER	5 To 20 % by weight	Medium
THINNER BGA	5 To 20 % by weight	Slower

**Retarder:** TPD RETARDER 1 to 3 % by weight

### **Drying & Curing**

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Ink type **417** dries to the touch within 30 seconds at room temperature. Drying time may be reduced with forced hot air @ 200 - 400 Degrees F. Normally, full cure is achieved after 5 to 6 days depending on curing temperature, time, and humidity. Heat curing is necessary for better adhesion and performance results.

### **Colors**

**\*Custom Colors Available Upon Request\***

**Ink Type 417 is available in:**

- \* 23 Standard Opaque Colors
- \* Standard Metallic Colors
- \* Process colors
- \* C-Mix 2000 Color Matching System

**Our NT Series Inks conform to US C.O.N.E.G. Legislation and European Standard EN 71, part 3 Safety of Toys (1989) For special applications - examples, Medical, Automotive, MIL-STD please call**

### **Use & Storage Information**

**\*For more information see Material Safety Data**

**Sheets\***Ink type **417:** Stir ink thoroughly before removing from container. Reseal lid tightly after using.

**Shelf Life:** 2 years (Original sealed container)

**Hardener:** Reseal container immediately after using. Hardener is humidity sensitive. As moisture is absorbed the viscosity first increases, then starts forming crystals. Do not use when crystals first appear.

**Shelf Life:** 1 year (Original sealed container)

**Thinner:** **Shelf Life:** 2 years (Original sealed container)

**Storage of Products:** At room temperature 60 to 80 Degrees F with low humidity

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**Recommended Printing Substrates (Type 417 continued)**  
**\*May Require Pretreatment\***

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<b>SUBSTRATE NAME / CHEMICAL NAME</b>	<b>ASTM / ISO ABBREVIATIONS</b>	<b>PLASTICS FAMILY</b>	<b>TRADE NAME</b>
<b>THERMOPLASTICS</b>			
Acrylonitrile-Butadiene- Styrene	( ABS )	ABS	Cyclac
Polymethyl Methacrylate	( PMMA )	Acrylic	Acrylite
Cellulose Acetate	( CA )	Cellulosic	Tenite
Polyphenylene Oxide*	( PPO )	Polyphenylene	Noryl
Polyamides	( PA )	Polyamides	Nylon
Polycarbonate	( PC )	Polycarbonate	Lexan
Polypropylene *	( PP )	Polyolefin	
Polyvinyl Chloride Rigid	( PVC )	Vinyl	
<b>METALS</b>			
Aluminum	( Al )		
Anodized Metal			
Steel			
Miscellaneous Metals			
<b>FLEXIBLE PLASTICS</b>			
<b>OTHERS</b>			
Polycarbonate / ABS			Cycloy

**\*\*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.**