



## Technical Bulletin

### **Hardcoat Clears** UV Curable Screenprinting Inks

Polymeric's abrasion-resistant, clear coatings are specifically formulated as a protective finish for interior decorative trim as well as electronic instrument panels. These clears offer unique film properties to overprint U.V. and conventional ink systems and provide a finish ranging from high gloss, water white, to velvet or highly textured satin.

The over-printed graphic will have a durable finish with outstanding mar, abrasion and chemical resistance. Other decorative prints may be screened directly onto this product with excellent adhesion characteristics. These clear coatings have tremendous thermal stability not commonly found among U.V. coatings.

- Standard gloss levels are 6% using a 60 degree angle measurement.
- Adheres well to polycarbonate, acrylic, PVC, ABS, PETG and most other rigid plastics

#### **APPLICATION:**

<b>Mixing:</b>	Clear coats are supplied at screen print viscosity and can be used directly from the container. Thinning is not recommended. For spray applications dilute with Isopropanol to proper viscosity. When roller coating, reduce with Xylol. Prior to cure, flash off the solvents with infra-red lamps
<b>Mesh:</b>	390 to 420 plain weave (150 - 165 cm) for gloss hard coats. 305 plain weave (120 cm) for textured satins
<b>Squeegee:</b>	Sharp 60 to 80 durometer polyurethane blade
<b>Cure Parameters:</b>	1 - 300 watt per inch medium pressure mercury vapor lamps  Prior to cure, a finer texture and lower gloss may be achieved by subjecting the printed surface to radiant heat of approximately 150°F to 185°F for five to ten seconds. This time may vary depending on individual manufacturing techniques
<b>Belt Speed:</b>	40 (12 m) feet per minute

**More than a shade superior**

117 East 14<sup>th</sup> Avenue • N. Kansas City, MO 64116 • 800 746 5567 • fax: 816 221 4820

## PRODUCT RESISTANCE:

The following test results are only a few of the stringent requirements that these clear coats must pass as part of our on-going quality control process.

Water	300 hours @ 105° F
Humidity	200 hours @ 150° F
Heat	200 hours @ 150° F
Taber Abrasion	3000 cycles, 500 gram load CS10 wheel

## CHEMICAL IMMERSION:

Windshield Washer Fluid	Silicone Fluid
Pledge	Vinyl Cleaner
Multi-purpose Cleaner	Various Soap Solutions
Spic & Span	MEK & IPA Spot Test (not immersion tested)
WD-40	Turtle Wax
Oven Cleaner	Anti-Freeze
Armor All	

*All chemical tests finalized after 24 hours with no discoloration or adhesion failure.*

### Available as:

# 1814 Gloss Hard Coat Clear  
# 1815 Satin Hard Coat Clear  
# 1945 Hard Coat Satin Clear  
# 2278 Hard Coat Texture Clear  
# 4506 Hard Coat Matte Clear  
# 4693 Hard Coat Texture Clear

### Similar to:

GE 8A13F  
GE 8A13  
GE 8B35  
GE 8A35

*Effective 11/30/01*

**More than a shade superior**

---

117 East 14<sup>th</sup> Avenue • N. Kansas City, MO 64116 • 800 746 5567 • fax: 816 221 4820