

### PRODUCT DATA SHEET

**Product Name-** Extreme 3106

**Extreme 3106** is a clear, medium viscosity UV curing adhesive for bonding all transparent plastic substrates, especially polycarbonate, PVC; clear ABS to themselves or to glass. **Extreme 3106** cures rapidly, in 3 seconds or less, when exposed to ultraviolet light from medium pressure mercury or microwave lamps, but also can be cured with visible light. Cured performance shows excellent adhesion to most types of plastic substrates with good temperature and solvent resistance, and toughness at all temperatures. **Extreme 3106** is formulated especially for bonding clear plastics, such as polycarbonates, acrylates, Mylar and PVCs where high clarity is required. It is tough and flexible, and meant for dissimilar substrates like plastics and glass to accommodate different coef. of expansion.

**Base Resin**- modified urethane acrylate **Percent Solids-** 100%

### **Benefits of Adhesives:**

- \* Medium Viscosity For controlled migration
- \* Cures in 5 Seconds With Medium Intensity UV Light
- \* Excellent Adhesion To Plastics
- \* 100% Solids Formulation For VOC Compliance
- \* Excellent Toughness And Durability
- \* Good Temperature And Solvent Resistance

### PHYSICAL PROPERTIES

# TYPICAL UNCURED PROPERTIES (LIQUID)

ViscositySpecific GravityColorFlashpointToxicity
5300 cps
1.08 (20/20C)
clear, water white
172F (TOC method)
moderate, see MSDS

Clean Up SolventsSolvents-none Component Parts-one Fillers- none

### TYPICAL CURING PROPERTIES

UV medium intensity, 200w/in bulb

100 mw/cm<sup>2</sup> at 365nm

**Exposure Time** 5 seconds per mil of thickness, ie 20 seconds for 4 mils

TYPICAL CURED PROPERTIES (SOLID) typical film thickness 0.010.

Shore D Hardness 53-55

**Thermal Service Range** -40F to 300F

**Refractive index** 1.50

Extreme 3106 PAGE 2

#### INSTRUCTIONS FOR USE

# **Typical Process Methods**

Apply with syringe, brush or other method or automatic applicator to bond area. Expose to UV light as below. Available in a variety of viscosities and colors.

### **Ultraviolet Cure**

Shield sealant from UV light during application to prevent polymerization lines on the part prior to application. Expose parts to ultraviolet light intensity of minimum 150mw/cm² of 240 to 400 nanometers for 5-10 seconds. Cure time depends on coating thickness, distance from energy source and the lamp's power. Wand lamps have higher intensities of up to 2000 mw/cm² and will cure the product in 5 seconds or less. For microwave lamps, the H bulb is recommended to produce fastest cures.

The coating will be cured immediately after UV exposure and can be handled or packaged. Cure continues for several minutes during the cool down process. Solvent, peel or temperature service testing should be done after 10 minutes when the sealant returns to room temperature.

# **Application Note**

Material is note sensitive to moisture or oxygen, but is sensitive to UV light and heat.

**Shelf Life of Packaged Product** 12 months at 75°F when stored and sealed in original opaque containers.

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