Adhesive Systems, Inc.
An ISO 9001:2008 Certified Company

MAXIMUM PERFORMANCE SERIES
MP531193P
UV ADHESIVE

TECHNICAL DATA SHEET
TDS #: MP531193P
UV Adhesive

DESCRIPTION

MP531193P **is a high performance UV curing adhesive engineered to bond plastics, metal, and glass. It can be used in a variety of product assemblies and it promotes innovative design solutions. It is a fast curing adhesive and a leading performer when used for dome coating and potting applications. MP531193P is often cured with an electroless lamp D, medium pressure metal halide lamp. This UV adhesive also works well with UV light emitted diodes (UV LED) at wavelengths of 365 nm to 410 nm. Design engineers select MP531193P for the optimum in finished product quality, reliability, performance, and cost effectiveness. MP531193P is an essential tool in improving overall product quality, lowering per unit cost, and reducing processing time.**

PHYSICAL PROPERTIES (UNCURED):

Chemical Class	Acrylate
Solvent Content	None
Appearance	Colorless Liquid
Density, g/ml	1.05
Viscosity, 25 °C, 20 RPM	2000cp-4000cp
Flash Point °C	77

PHYSICAL PROPERTIES (CURED):

Durometer Hardness	D70
Water Absorption, 2 hrs. @100 °C	5%
Water Absorption, 24 hrs. @ 25 °C	5%
Glass Transition Temperature, °C	65
Tensile Strength PSI	5100
Dielectric Constant	<4
Dielectric Strength, volts/mil	>400
Working Temperature °F	-60 to 300
Flexibility@RT	None
Blue Flouresing	None

Benefits

- Superior Bond Strength
- Solvent Free
- Low Odor
- Improves Finished Product Quality
- Durable
- Good Impact and Vibration Resistance
- Easily Automated
- No Clean Up

Substrate Applications

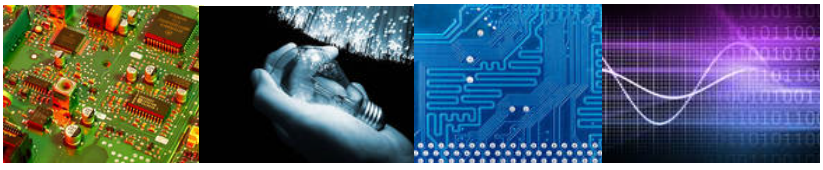
Metal
Plastics
Glass

CURE SCHEDULE

Medium Pressure Metal Halide Flood Lamp Station @ 50mW/cm2	Cured surface is dry @ 50 mW/cm2 for 2 minutes
Fusion F 300S Lamp D Conveyor @ 5 FPM	Cure Depth @ 1.00 inch
Fusion F 300 S Lamp D Conveyor @ 10 FPM	Cure Depth @ 0.70 inch
Fusion F 300 S Lamp D Conveyor @ 20 FPM	Cure Depth @ 0.40 inch
Fixed time between 2 Glass Slides @ low intensity black light	0.5 second
Flood Lamp @ 50 mW/cm2 for 1 minute	Cure Depth @ 1.00 inch
Flood Lamp @ 50 mW/cm2 for 2 minute	Cure Depth @ 1.25 inch
Flood Lamp @ 50 mW/cm2 for 30 minute	Cure Depth @ 0.70 inch
UV LED 365 nm to 410 nm	Time depends on the intensity and wavelength

Storage and Shelf Life

This UV Cure material should be stored in a dark place, above 0°C and below 30 °C. The shelf life is one year from the date of manufacture.



Engineering Excellence
For technical information
and support call **1-800-552-0299** or visit our website at
www.instantca.com

Directions for Use

1. This product cures at exposure to daylight. Minimize to expose during storage and handling.
2. Surface of substrates should be clean and free from grease, mold release, or other contaminants.
3. Cure speed is dependent on UV energy, intensity of UV Light, required depth of cure and percentage of light transmission of substrates.
4. For the best performance, Fusion Lamp D or medium pressure metal halide should be used. Also, UVLED at 365 nm to 410 nm can be used.
5. Allow cured parts to cool before testing to any service loads.
6. Air inhibits a surface cure. To minimize this effect an inert gas such as nitrogen can be used or a higher intensity can be used.