

# APTEK LABORATORIES, INC.

ISO 9001 / AS9100 Certified

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# **TECHNICAL DATA & INFORMATION**

UVISTAKE<sup>™</sup> 7207

UV Curing, Urethane Staking Compound

### PRODUCT DESCRIPTION

**UVISTAKE 7207** is a 100% solids, thixotropic, one component, electrically insulating, urethane system designed for the attachment and staking of electrical/electronic components mounted on printed circuit boards. This system provides an excellent combination of flexibility and strength for demanding applications where toughness is required for the management of thermomechanical stresses.

**UVISTAKE 7207** will become tack free when exposed to the proper UV light radiation.

# **KEY FEATURES AND BENEFITS**

- · Good flexibility for reduced stress in the encapsulation of sensitive glass-bodied components
- Highly reversion resistant for good physical stability under high heat and humidity environments
- Excellent adhesion to plastic/metal components and substrates. Adheres well to itself for multicoat and repair applications
- Packaged in syringes for convenient dispensing. Plungers available for hand operation or pneumatic--type syringes for automated dispensing.
- No TDI, no toxic solvents, no free acrylic acid for safety
- Low viscosity version available for bonding, coating and potting applications designated as **UVIBOND**<sup>™</sup> **7100**.

## **HANDLING INFORMATION**

Note: Work life adversely affected by heat and humidity. Keep material away from direct sunlight. Store in original factory sealed containers/syringes.

#### CURE SCHEDULE

#### U.V. Cure with Conveyor Equipment

2 passes under 300 W/in Fusion UV, D-bulb lamp at rate of 5 foot per min.

#### **U.V. Cure with Spot Cure Equipment**

We recommend using an EFOS Novacure or equivalent equipment with similar power generating capabilities. This system is capable of generating the same amount of energy as in cure #1. In some applications, diffusers may be necessary to insure even energy distribution and complete cure. Customer should consult Aptek Laboratories and/or equipment supplier to optimize cure for individual applications.

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Note: The above cure schedules are conservative and should be used as guidelines only. User should determine proper cure schedule based on applications requirements and properties desired.

#### **TYPICAL PROPERTIES**

(not for specification purposes)

CHARACTERISTICS	<u>7207</u>	TEST METHOD
Color	Hazy yellow/amber	Visual
Specific gravity	1.07	ASTM D-1475
Viscosity @ 20°C,cps	thixotropic paste	ASTM D-1824
Flash point, °C	>100°C	TCC
Shelf life @ 25°C, in factory sealed containers, months	6	
CURED PHYSICAL PROPERTIES	<u>7207</u>	TEST METHOD
Hardness, Durometer D	80	ASTM D-2240
Fungus resistance	Non-nutrient	ASTM G-21
CURED ELECTRICAL PROPERTIES	<u>7207</u>	TEST METHOD
Volume resistivity, @25°C, ohm-cm	1.0 x 10 <sup>14</sup>	ASTM D-257
Dielectric constant, @1KHz, @25°C	3.8	ASTM D-150
Dissipation factor @1KH <sub>z</sub> , @25°C	0.04	ASTM D-150
Dielectric strength, 0.003" thick film, volts/mil	>1500	ASTM D-149
Insulation resistance, ohms	1.0 x 10 <sup>13</sup>	MIL-I-46058C

#### SAFETY AND FIRST AID

**UVISTAKE 7207** is 100% solids organic acrylated resin blend usually packaged in syringes and is thus considered safe to use when handled properly. Store at 25°C or below and keep away from flame, sparks, or other sources of ignition. Use in a well ventilated area and avoid breathing vapors. In case of eye contact, flush with fresh clean water for at least 15 minutes; for skin contact, wash thoroughly with soap and water. If swallowed, drink at least one pint of water and call a physician. Refer to Material Safety Data Sheet for more details.

Revised: 05/23/13 – jv Issued: 8/01/06 UVISTAKE<sup>™</sup> is a trademark of Aptek Laboratories, Inc. UVIBOND<sup>™</sup> is a trademark of Aptek Laboratories, Inc. Aptek® is a registered trademark of Aptek Laboratories, Inc.