



APTEK LABORATORIES, INC.

ISO 9001 / AS9100 Certified

28570 Livingston Avenue, Valencia, CA 91355-4171 • (661) 257-1677 FAX (661) 257-8939

TECHNICAL DATA & INFORMATION

APTEK® 2201-A/B

Fast set urethane adhesive

PRODUCT DESCRIPTION

APTEK 2201-A/B is a two component, dark gray, urethane adhesive system displaying excellent adhesion to various plastic, wood, ceramic, and metal substrates.

APTEK 2201-A/B is capable of achieving full cure at room temperature or can be accelerated with moderate heat.

KEY FEATURES AND BENEFITS

- Fast setting - ideal for field repair, sealing, and patching applications
- Very good resistance to heat and moisture for outdoor use
- Remains flexible over time/aging
- Easy to use 1:1 mix ratio
- Thixotropic - will not sag on vertical surfaces
- Mixes to a third color to ensure a uniform mix
- For convenient handling, pre-packaged in dual cartridge kits

HANDLING INFORMATION

Mix ratio, parts by volume: 100 (2201-A) / 100 (2201-B)

Gel time @ 25°C, 50 gm mass (concentrated), mins: 2-4

SURFACE PREPARATION:

1. Thoroughly clean surface area with detergent and water to remove all dirt, grease, or wax.
2. Using 40-60 grit paper, thoroughly sand all surfaces to be bonded.
3. Clean all parts with a solvent such as methyl ethyl ketone (MEK).
4. All surfaces must be dry before applying adhesive.

MIXING INSTRUCTIONS:

For dual cartridge kits the adhesive is mixed and dispensed in one operation.

Dual cartridge/dispenser kits

- Hold cartridge firmly and upright.
- Twist protective cap counterclockwise 90° and pull protective cap off, exposing the adhesive ports.

- DISCLAIMER NOTICE -

All statements, technical data, and recommendations expressed herein are based on tests believed to be reliable and accurate. However, APTEK LABORATORIES, INC. gives no warranty, expressed or implied, regarding the accuracy of this information. It is intended that the buyer and user of these products shall determine the suitability of the information provided for his specific application, and is responsible for its selection.

APTEK LABORATORIES, INC. shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use or misuse of these products, or of the information given in these data bulletins. Purchasers assume all risk and liability whatsoever in connection with the use of these products and this information.

- Insert flanged base of mixing tube over the exposed adhesive ports perpendicular to the cartridge bracket. Note this is keyed and will only fit in one orientation.
- Rotate turquoise collar clockwise 90°. Ensure that mix tip is securely attached.
- Hold gray handles of ratchet gun, with up arrow facing you.
- While lifting and holding up silver lever with thumb, pull back black plunger fully, until it stops.
- Insert the cartridge into slot in front of gun.
- Continue to apply pressure to trigger to dispense adhesive through the tube.
- Allow one inch of adhesive to extrude before applying to bonding surface.
- Cut back tip of tube to adjust bead size.
- If using a luer lock adaptor, cut off the first two segments from the mix tip. Thread the luer lock adaptor on the third segment. Attach appropriate compatible luer lock tip.
- To remove plunger from spent cartridge hold up silver lever and pull back black plunger fully; then cartridge can be removed from gun.

APPLICATION NOTES:

1. **IMPORTANT** - **APTEK 2201-A/B** is a **fast set** adhesive.
2. Work life depends on temperature and mass. For 100 gm mass spread out over a 10" x 10" mixing surface, the typical work life is 6-8 minutes @ 25°C.
3. Caution: If more material is mixed together, work life will be drastically reduced.
4. Parts must be held in place with clamps or tape until a firm set is achieved, 30-60 minutes for most parts. The length of time required for the adhesive to achieve a firm set depends on the temperature of both the work area and the parts at time of bonding.

CURE SCHEDULE

RT gel + 2 hrs @ 65°C
OR
Reaches 90% of properties in 24 hours at RT

TYPICAL PROPERTIES

(values not to be used for specification purposes)

<u>CHARACTERISTICS</u>	<u>2201-A</u>	<u>2201-B</u>	<u>TEST METHOD</u>
Color	Black	White	Visual
Specific gravity	1.23	1.19	ASTM D-1475
Viscosity @25°C,cps	30,000	45,000	ASTM D-1824
Flash Point, °C	>125°C	>125°C	ASTM D-92
Shelf life @ 25°C, mos cartridge kits	3	3	

<u>CURED PHYSICAL PROPERTIES</u>	<u>APTEK 2201-A/B</u>	<u>TEST METHOD</u>
Hardness, Durometer A	80	ASTM D-2240
Tensile Strength, psi	2200	ASTM D-638
Elongation, %	200	ASTM D-638
Lap shear, Al to Al, psi @ 25°C, 50 grit, sanded/solvent wiped	2000	ASTM D-1002

SAFETY AND FIRST AID

APTEK 2201-A is a mineral filled polyol resin that is safe to handle when used properly. It is judged to be low in toxicity and to be rated as a slight skin irritant. Avoid contact with skin and eyes. 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.

APTEK 2201-B is an organic isocyanate which may cause severe eye and skin irritation with direct contact. Inhalation of vapors may result in breathlessness, severe coughing, chest discomfort, and irritation of mucous membranes. Avoid skin and eye contact and use in a well-ventilated, hooded area. In case of eye contact, flush profusely with fresh clean water and contact a physician. For skin contact, wash thoroughly with soap and water. If inhaled, move subject to fresh air and provide water to drink. If swallowed, dilute with at least one pint of water and contact physician immediately. Refer to Material Safety Data Sheet for more details.

Revised: 11/18/09 - di

Issued: 6/14/91

APTEK[®] is a registered trademark of Aptek Laboratories, Inc.