

Pacer Technology's ZAP IT is a light-curing instant cyanoacrylate adhesive. The product is odorless and has a medium viscosity intended for rapid bonding. This unique adhesive cures rapidly when exposed to UV and visible light. An LED lighting device conveniently offered with the product allows the user to cure their adhesive on the go. In addition to light curing ZAP IT also utilizes shadow cure<sup>1</sup> properties for non-exposed surfaces. ZAP IT has excellent strength characteristics and can be used on a variety of substrates.

### PROPERTIES:

#### LIQUID STATE

Chemical base	ZAP IT
Viscosity, cps	2-Methoxyethyl 2-cyanoacrylate, with photo initiator
Color	180 - 220
Specific gravity (@25°C, g/cm <sup>3</sup> )	Transparent yellow to light green liquid
Flashpoint TCC (°C)	1.19
Soluble in:	80-93.3
	Acetone, MEK

#### CURING PERFORMANCE

Typical bond thickness	ZAP IT
Tack free time / Surface cure	0.002"
UV/Visible light sources:	Electrodeless, V bulb:
	70 mW/cm <sup>2</sup> , measured @ 365 nm: <10 s.
Visible light sources:	
Pacer's LED light:	Measured @ 400 nm: <10 s.
Blue laser:	70 mW/cm <sup>2</sup> , measured @ 445 nm <10 s.
Service temperature	- 65 to 175°F (-54° to 79°C)
Soluble in:	Pacer X-9 Debonder, Acetone

#### **Tensile Shear Strength:**

Cure with Blue-Violet LED light for 5 seconds

	Strength (N/mm <sup>2</sup> ) after 5 s LED curing, measured immediately	Strength (N/mm <sup>2</sup> ) after 5 s LED curing measured after 24h at RT
Acrylic	3.1	6.2*
Acrylic-Aluminum	6.8*	8.4*
Polycarbonate (PC)	3.0	7.6
PC-Aluminum	7.6	8.2

\*Substrate failure

Shadow cure

	Strength (N/mm <sup>2</sup> ) after 5 s LED curing, measured immediately	Strength (N/mm <sup>2</sup> ) after 5 s LED curing measured after 24h at RT
Beech Wood	8.4	12.7
Aluminum A57554	6.1	8.1
Mild steel	5.5	11.0

<sup>1</sup>The property of curing without sunlight.

**STORAGE AND SHELF LIFE:**

Refrigerate unopened cyanoacrylate @ 35.6-46.4F (2-8C) for optimum results. Allow adhesive to reach room temperature before opening. Once opened, store in a cool, dry location. Store the product in a container protected from light. Stored under these conditions, a one-year shelf life can be expected.

**APPLICATION AND CURE CHARACTERISTICS:**

1. This product is light sensitive. Exposure to daylight, UV light and artificial light should be kept to a minimum during storage and handling to prevent curing.
2. Protect clothing and work surfaces (aluminum foil works well).
3. POINT TUBE AWAY FROM FACE AND BODY, DO NOT SQUEEZE TUBE WHILE PUNCTURING. To puncture, screw nozzle and cap assembly onto tube completely.
4. Remove outer cap.
5. Apply glue sparingly (one drop per square inch) to one surface only. For optimum bonding, surfaces should be clean and dry. Do not spread glue with fingers or nozzle.
6. Clean tip and replace cap immediately after applying glue. Prolonged exposure to light can cure adhesive.
7. Press pieces together.
8. Use provided LED light to cure exposed glue (make sure the light covers all the dispensed glue). Keep distance between the light and glue short for better cure (less than 5 cm). The light will not penetrate substrates that aren't clear.
9. Store in cool dry, dark place.

\*Steel to steel after 24 hours elapsed.

Not recommended for: bonding parts which are subject to great shock or immersion in water, polyethylene, and polypropylene or for reattaching rear view mirror to windshield (use Super Glue Corporation Rear View Mirror Adhesive). It is user's responsibility to determine suitability of product for proposed use.

**SAFETY AND HANDLING PRECAUTIONS:**

Contains 2-methoxyethyl 2-cyanoacrylate. Skin contact through clothing may cause burns. For accidental eye contact, flush with water for 15 minutes; get medical attention for eye or internal contact. To remove from skin, soak in acetone nail polish remover and gently peel adhesive off with fingernail; water exposure will wear off residual adhesive within a few days (do not use polish remover around eye area). The LED emits a small amount of UV light. Direct exposure to bright light may damage eyes. Do not look or direct light at people or animals. **KEEP OUT OF REACH OF CHILDREN.**

For more information, refer to Safety Data Sheet, available upon request. In case of emergency, call CHEMTREC at (800) 424-9300 or call Pacer Technology at (800) 538-3091 (outside CA only), or (909) 987-0550.

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