

# HP 250

**Description:** High performance epoxy with high shear strength, impact toughness for structural assembly applications.

**Intended Use:** Bonds metals, FRP/SMC composites, phenolics, galvanized metals, AL, vinyl esters, nylon, PVC, PC, styrenics, wood, and rigid plastics.

**Product features:** **Non-corrosive/outstanding chemical resistance**  
**Excellent salt spray durability**

**Limitations:** None

**Typical Physical Properties:** *Technical data should be considered representative or typical only and should not be used for specification purposes.*

**Cured 7 days @ 75° F**

<b>T-peel</b>	35-40 pli	<b>TESTS CONDUCTED</b> Cured Hardness Shore D ASTM D 2240 Adhesive Tensile Shear ASTM D 1002 T-Peel Strength ASTM D 1876
<b>Impact Resistance</b>	12 ft.lb./in(2)	
<b>Tensile Elongation</b>	25%	
<b>Shore Hardness</b>	78 Shore D	
<b>Gap-Fill</b>	Excellent	
<b>Dielectric Strength</b>	490 volts/mils	
<b>% Solids by Volume</b>	100	
<b>Adhesive Tensile Lap Shear[GBS]</b>	3,200 psi @ 0.010" bondline	
<b>Specific Volume</b>	25.5 in.(3) /lb.	

**Uncured**

<b>Color</b>	Straw
<b>Viscosity</b>	Resin: 120,000 cps; Hardener: 75,000 cps
<b>Mixed Viscosity</b>	105,000 cps
<b>Mix Ratio by Volume</b>	2:1
<b>Mix Ratio by Weight</b>	100:42
<b>Mixed Density</b>	9.00 lbs/gal.: 1.08 gm/cc
<b>Working Time</b>	65 min. @ 72°F
<b>Fixture Time</b>	5 hrs. @ 72°F
<b>Functional Cure</b>	24 hrs. @ 72°F
<b>Full Cure</b>	36 hrs.
<b>Service Temperature</b>	-67°F to 250°F

**Surface Preparation:** Clean surface by solvent-wiping any deposits of heavy grease, oil, dirt, or other contaminants. Surface can also be cleaned with industrial cleaning equipment such as vapor phase degreasers or hot aqueous baths. If working with metal, abrade or roughen the surface to significantly increase the microscopic bond area and increase the bond strength.

**Mixing Instructions:** ---- Proper homogenous mixing of resin and hardener is essential for the curing and development of stated strengths. ----

**25 ML DEV-TUBE**

1. Squeeze material into a small container the size of an ashtray.
2. Using mixing stick included on Dev-tube handle, vigorously mix components for one (1) minute.
3. Immediately apply to substrate.

**50 ML/400ML/490 ML CARTRIDGES**

1. Attach cartridge to Mark 5 dispensing system.
2. Open tip.
3. Burp cartridge by squeezing out some material until both sides are uniform (ensures no air bubbles are present during mixing).
4. Attach mix nozzle to end of cartridge.
5. Apply to substrate.

**Application Instructions:**

1. Apply mixed epoxy directly to one surface in an even film or as a bead.
2. Assemble with mating part within recommended working time.

3. Apply firm pressure between mating parts to minimize any gap and ensure good contact (a small fillet of epoxy should flow out the edges to display adequate gap fill.)

For very large gaps:

1. Apply epoxy to both surfaces
2. Spread to cover entire area OR make a bead pattern to allow flow throughout the joint

Let bonded assemblies stand for recommended functional cure time prior to handling.

-CURE SCHEDULE-

7 days @ 25°C. For ultimate chemical and thermal resistance, elevated the cure schedule to 2 hours @ 80°C.

CAPABILITIES:

Can withstand processing forces  
Do not drop, shock load, or heavily load

**Storage:** Store in a cool, dry place.

**Compliances:** None

**Chemical Resistance:** *Chemical resistance is calculated with a 7 day, room temp. cure (30 days immersion) @ 75°F*

Acetic (Dilute) 10%	Excellent	Motor Oil	Excellent
Ammonia	Excellent	Sodium Hydroxide 10%	Very good
Cutting Oil	Excellent	Sodium Hypochlorite	Excellent
Ethanol	Very good	Sulfuric 10%	Very good
Gasoline (Unleaded)	Excellent		
Hydrochloric 10%	Excellent		
Isopropanol	Very good		
Mineral Spirits	Excellent		

**Precautions:** Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

**For technical assistance, please call 1-800-933-8266**

**FOR INDUSTRIAL USE ONLY**

**Warranty:** Devcon will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

**Disclaimer:** All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Devcon makes no representations or warranties of any kind concerning this data.

**Order Information:** 14315 50 ml DevPak  
14415 400 ml cartridge