



# Backing Compound

**Description:** High-strength liquid epoxy with the necessary resiliency and strength to withstand forces generated by crushers and mills.

**Intended Use:** Rod, ball, pebble, and autogenous mills; cone and gyratory crushers

**Product features:** **High compression and impact strength**  
**Low exothermic reaction**  
**Easy to pour; easy to use**  
**Negligible shrink**  
**100% solids - no solvents**

**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>Color</b>	Greenish brown
<b>Mix Ratio by Volume</b>	9:1
<b>Mix Ratio by Weight</b>	100:6.84
<b>% Solids by Volume</b>	100
<b>Pot Life @ 75F</b>	15 min.
<b>Specific Volume</b>	17.2 in.(3)/lb.
<b>Cured Shrinkage</b>	.001 in./in.
<b>Specific Gravity</b>	1.65 g/cm(3)
<b>Temperature Resistance</b>	250°F
<b>Coverage/lb</b>	349 cu.in./1.5 gal.
<b>Cured Hardness</b>	92D
<b>Adhesive Tensile Shear</b>	2,000 psi
<b>Compressive Strength</b>	13,880 psi
<b>Modulus of Elasticity</b>	9.2 psi x 10(5) in.
<b>Flexural Strength</b>	8,558 psi
<b>Coefficient of Thermal Expansion</b>	22 [(in.) x (in.) x °F] x 10(-6)
<b>Cure Time</b>	8 hrs.
<b>Mixed Viscosity</b>	4,700 cps
<b>Izod impact strength</b>	1.3 ft.lb./in.
<b>Maximum operating temperatures</b>	250°F

**TESTS CONDUCTED**

Cured Hardness Shore D ASTM D 2240  
Izod Impact ASTM D 2566  
Compressive Strength ASTM D 695  
Cure Shrinkage ASTM D 2566  
Flexural Strength ASTM D 790  
Tensile Strength (Epoxies) ASTM D 638  
Coef. of Thermal Expansion ASTM D 696  
Modulus of Elasticity ASTM D 638

**Surface Preparation:**

1. Thoroughly clean the surface with Devcon® Cleaner Blend 300 to remove all oil, grease, and dirt.
  2. Grit blast surface area with 8-40 mesh grit, or grind with a coarse wheel or abrasive disc pad, to create increased surface area for better adhesion (Caution: An abrasive disc pad can only be used provided white mesh is revealed). Desired profile is 3-5mil, including defined edges (do not "feather-edge" epoxy).
- Note: For metals exposed to sea water or other salt solution, grit-blast and high-pressure-water-blast the area, then leave overnight to allow any salts in the metal to "sweat" to the surface. Repeat blasting to "sweat out" all soluble salts. Perform chloride contamination test to determine soluble salt content (should be no more than 40ppm).
3. Clean surface again with Cleaner Blend 300 to remove all traces of oil, grease, dust, or other foreign substances from the grit blasting.
  4. Repair surface as soon as possible to eliminate any changes or surface contaminants.

WORKING CONDITIONS: Ideal application temperature is 55°F to 90°F. In cold working conditions, heat repair area to 100-110°F immediately prior to applying epoxy to dry off any moisture, contamination, or solvents, as well as to assist epoxy in achieving maximum adhesion properties.

**Mixing Instructions:**

---- It is strongly recommended that full units be mixed, as ratios are pre-measured. ----

1. Add hardener to resin
2. Mix thoroughly with screwdriver or similar tool (continuously scrape material away from sides and bottom of container) until a uniform, streak-free consistency is obtained.

LARGE SIZES (2 lb., 25 lb.): Use a propeller-type Jiffy Mixer Model ES on an electric drill. Mix until color is uniform and consistent.

Note: Keep propeller below liquid line, as additional air can be added to mixture, resulting in air bubbles on the surface of the finished product.

**Application Instructions:**

When pouring Backing Compound, observe the following guidelines:  
 -Thoroughly mix Backing Compound, then immediately pour into designated area, allowing compound to fill the cavity and push air away from the pour.  
 -Use a dam (tin, cardboard, clay, or Devcon Plastic Welder) to seal areas and direct flow of the compound to the specified area.  
 -Any unmixed resin (different color) clinging to the sides and/or bottom of the pail should NOT BE poured into the crusher, as it may not harden.

**ADDITIONAL INFORMATION:**

-Backing compound may be mixed and poured individually as needed.  
 -Backing Compound will adhere to itself.  
 -Applying epoxy at temperatures below 70°F lengthens functional cure and pot life times. Conversely, applying above 70°F shortens functional cure and pot life.  
 Backing Compound fully cures in 16 hours, at which time it can be machined, drilled or painted.

**Storage:**

Store at room temperature.

**Compliances:**

None

**Chemical Resistance:**

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

1,1,1-Trichloroethane	Poor	Potassium Hydroxide 20%	Very good
Ammonia	Excellent	Potassium Hydroxide 40%	Excellent
Cutting Oil	Excellent	Sodium Chloride Brine	Very good
Gasoline (Unleaded)	Very good	Xylene	Very good
Hydrochloric 10%	Very good		
Hydrochloric 36%	Poor		
Mineral Spirits	Very good		
Nitric 50%	Poor		

**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:**

**11150 20 lb.**