



## Elemelt Technical Data Sheet **SP92-180-B**

Elemelt SP92-180-B is a high molecular weight polyamide resin designed for low pressure molding. This resin has the characteristics of a short open time with a high softening point and excellent adhesion to multiple substrates. Application temperature is 210-230°C which is ideal for PCB encapsulation and durability. Adhesion can be improved with plasma treating or by using chemical primer. This product is available in both amber and black.

### 1. TYPICAL SPECIFICATIONS

Appearance	: Black pellet solid.
Viscosity (mPas / 200°C)	: 3,000 ~ 4,000
Color (Gardner)	: 10 Max.
Softening Point (°C)	: 180 ~ 190
Working Temperature (°C)	: -30 to 150
Elongation	: 500%
Tensile Strength	: 90kgf/cm <sup>2</sup>
Acid Value (mg-KOH / gm)	: 10 Max.
Amine Value (mg-KOH / gm)	: 1 Max.
Specific Gravity (23°C)	: 1.0

### 2. SHORE-A HARDNESS

Measured Temperature °C	Shore-A Hardness
23	99
40	94
60	90
80	82
100	77
120	58

Shore hardness measured after storing one hour at each measuring temperature

### 3. HEAT CREEP TEMPERATURE

Shear creep temperature : 155°C

Remarks: Test Specimen-Steel (25mm x 25mm) Weight-500g Heating speed-2°C /5min

**4. PEEL STRENGTH**

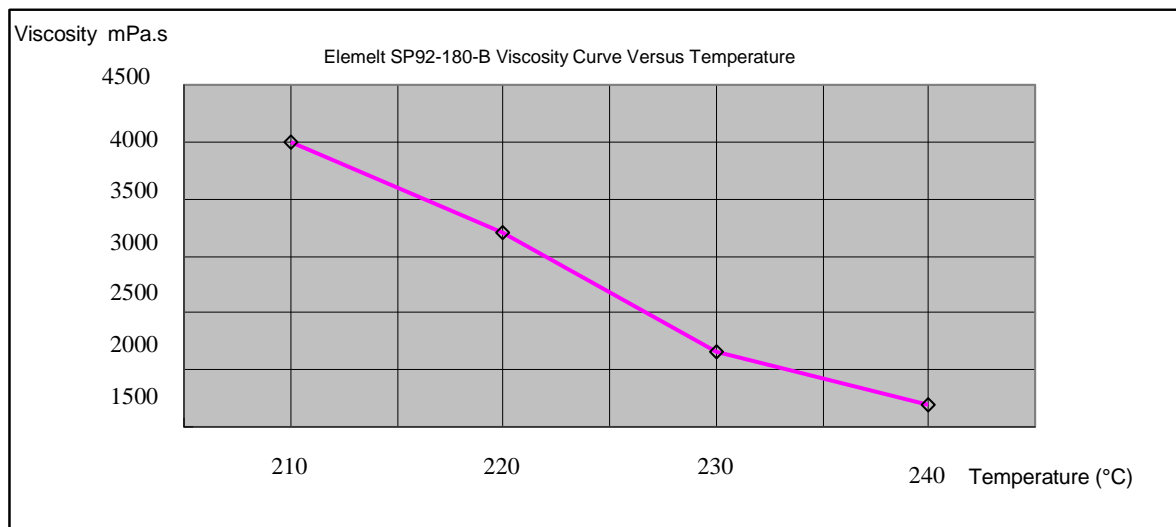
Maximum Peel Strength :135 N/25mm  
Average Peel Strength : 84 N/25mm

Remarks: Test Specimen - Steel/Canvas Tensile Speed: 50mm/min, At 23°C 50%RH

**5. WATER ABSORPTION**

Water Absorption (%) : 0.4 (23°C x 30 Days, RH50%)  
Water Absorption (%) : 0.7 (23°C x 1 Day, In Water)  
Water Absorption (%) : 2.5 (23°C x 30 Days, In Water)

**6. VISCOSITY CURVE VERSUS TEMPERATURE**



**7. APPLICATION TEMPERATURE**

210°C ~230°C

**8. PACKAGING**

20 kg net, paper bag.

**9. STORAGE CONDITIONS**

Store in sealable container once shipping bag has been opened. Polyamides are sensitive to high humidity and will absorb atmospheric moisture. Shelf life is 2 years with proper storage and at a temperature below 30°C.

