



## Elemelt Technical Data Sheet **SP79-160-A**

Elemelt SP79-160-A is a high molecular weight polyamide resin designed for low pressure molding. This resin has the characteristics of a high softening point and excellent adhesion to multiple substrates. Application temperature is 180-200°C which is ideal for PCB encapsulation eliminating solder reflow issues. 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	: Amber pellet solid.
Viscosity (mPas / 200°C)	: 2,000 ~ 5,000
Color (Gardner)	: 10 Max.
Softening Point (°C)	: 160 ± 5
Working Temperature (°C)	: -20 to 130
Elongation	: 400%
Tensile Strength	: 120kgf/cm <sup>2</sup>
Acid Value (mg-KOH / gm)	: 10 Max.
Amine Value (mg-KOH / gm)	: 2 Max.
Specific Gravity (25/25°C)	: 1.01
Open Time	: 28 Seconds

### 2. SHORE-A HARDNESS

Measured Temperature °C	Shore-A Hardness
23	79

Shore hardness measured after storing one hour at each measuring temperature

### 3. HEAT CREEP TEMPERATURE

Shear creep temperature : 150°C

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

**4. PEEL STRENGTH**

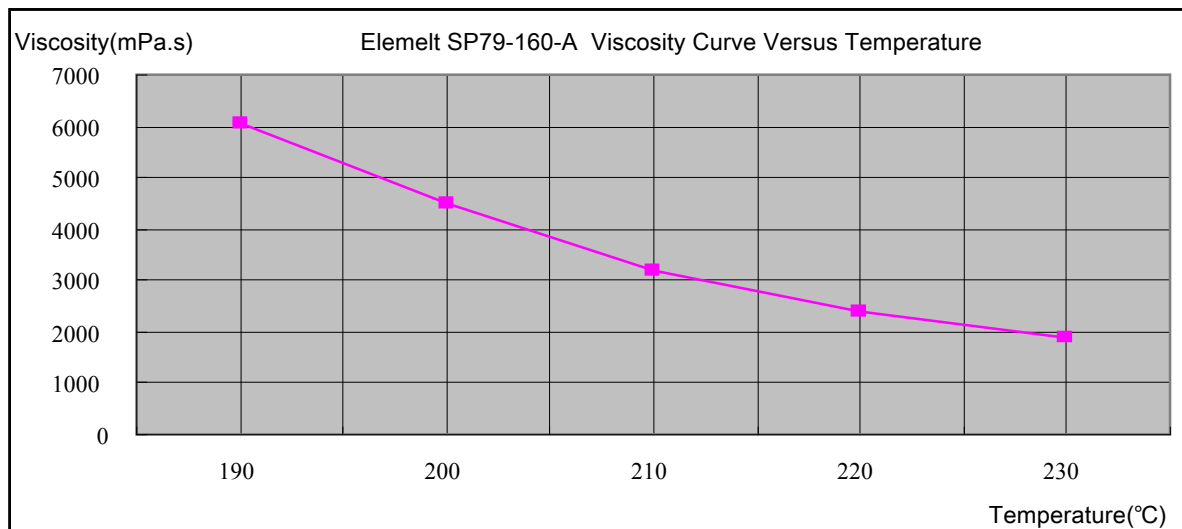
Maximum Peel Strength : 135 N/25mm  
Average Peel Strength : 84 N/25mm

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**

180°C ~200°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.