

LOW-PRESSURE MOLDING

Moldman Systems LLC 4649 Aircenter Circle, Ste. 101 Reno, Nevada 89502

> Main 775-332-1600 Fax 775-332-1601

moldmansystems.com contactus@moldmansystems.com

Elemelt Technical Data Sheet SP92-180-A

Elemelt SP92-180-A 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	: Amber 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/cm2
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

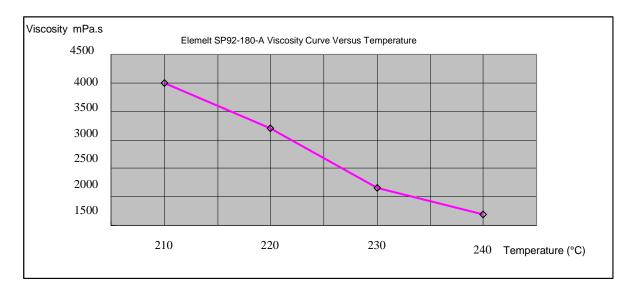
Maximum Peel Strength	:135 N/25mm
Average Peel Strength	: 84 N/25mm

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.

