## Razin<sup>™</sup> Engineering Plastics

**Form Code**:7Te02F1 No.:A121U-50

## Quality Management System

## **Product Information**



## Razamid<sup>®</sup>A121U-50

Razamid A121U-50 is an Injection grade Impact modified black color polyamide 66. It combines good strength, stiffness and toughness as well as excellent heat, chemical and abrasion resistance.

| Properties            | Test Method | Unit              | Value |
|-----------------------|-------------|-------------------|-------|
| Physical              |             |                   |       |
| Density               | ASTM D 792  | g/cm <sup>3</sup> | 1.13  |
| Linear Mold Shrinkage | ASTM D 955  | %                 | 0.8   |

| Mechanical              |            |       |      |
|-------------------------|------------|-------|------|
| Tensile Strength, Yield | ASTM D 638 | MPa   | 55   |
| Elongation at Break     | ASTM D 638 | %     | 40   |
| Flexural Strength       | ASTM D 790 | MPa   | 75   |
| Flexural Modulus        | ASTM D 790 | MPa   | 1900 |
| Izod Impact, Notched    |            | •     |      |
| @ 23 °C                 | ASTM D 256 | KJ/m² | 60   |
| @ -30 °C                |            |       | -    |

| Thermal                           |             |    |     |  |
|-----------------------------------|-------------|----|-----|--|
| Melting Point                     | ASTM D 3418 | °C | 250 |  |
| Deflection Temperature Under Load |             |    |     |  |
| @ 0.46 MPa                        | ASTM D 648  |    | 215 |  |
| @ 1.8 MPa                         |             | °C | 80  |  |
| Vicat Softening point             | ASTM D 1525 | °C | 225 |  |

| Electrical          |            |        |                  |
|---------------------|------------|--------|------------------|
| Surface Resistivity | IEC 60093  | Ohm    | 10 <sup>12</sup> |
| Volume Resistivity  | IEC 60093  | Ohm.cm | 10 <sup>13</sup> |
| Dielectric constant | ASTM D 150 |        |                  |
| Dielectric strength | ASTM D 149 | KV/mm  | 20               |

| Processing |                    |                  |                 |                |                |                     |
|------------|--------------------|------------------|-----------------|----------------|----------------|---------------------|
| Drying:    |                    |                  |                 |                |                |                     |
|            | Drying Time        | : 2.0 – 4        | .0 hr           | Drying Te      | emperature:    | 90 - 110 °C         |
| Injection  | Injection Molding: |                  |                 |                |                |                     |
| Item       | Rear Temp (°C)     | Middle Temp (°C) | Front Temp (°C) | Melt Temp (°C) | Mold Temp (°C) | Inj. Pressure (Mpa) |
| Min        | 260                | 265              | 275             | 275            | 50             | 55                  |
| Max        | 280                | 300              | 305             | 310            | 80             | 140                 |

The data contained in this publication are based on our current knowledge and experience. In view of the many actors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose.

Razin<sup>™</sup> Engineering Plastics

Sales Office: Unit1, No.332, Mokhberi Blvd, North janat abad St., Tehran, Iran

Tel: + (98) 21 44623931 Fax: +(98) 21 44623931

Web address: www.Razinpolymer.com