

# Duroloy® AS-61

Polycarbonate + ABS

Unigel Plásticos

## Message:

Medium flow rate and good impact resistance at low temperatures.

For injection molding.

Main applications: automotive and electrical-electronic.

| General Information                      |                                    |                   |                       |
|------------------------------------------|------------------------------------|-------------------|-----------------------|
| Features                                 | Low Temperature Impact Resistance  |                   |                       |
|                                          | Medium Flow                        |                   |                       |
| Uses                                     | Automotive Applications            |                   |                       |
|                                          | Electrical/Electronic Applications |                   |                       |
| Forms                                    | Pellets                            |                   |                       |
| Processing Method                        | Injection Molding                  |                   |                       |
| Physical                                 | Nominal Value                      | Unit              | Test Method           |
| Specific Gravity                         | 1.13                               | g/cm <sup>3</sup> | ASTM D792, ISO 1183   |
| Melt Mass-Flow Rate (MFR) (260°C/5.0 kg) | 12                                 | g/10 min          | ASTM D1238, ISO 1133  |
| Molding Shrinkage - Flow                 | 0.55 to 0.75                       | %                 | ASTM D955             |
| Water Absorption (23°C, 24 hr)           | 0.20                               | %                 | ASTM D570             |
| Mechanical                               | Nominal Value                      | Unit              | Test Method           |
| Tensile Modulus                          | 2200                               | MPa               | ASTM D638, ISO 527-2  |
| Tensile Strength                         |                                    |                   | ASTM D638, ISO 527-2  |
| Yield                                    | 47.0                               | MPa               |                       |
| Break                                    | 47.0                               | MPa               |                       |
| Tensile Elongation                       |                                    |                   | ASTM D638, ISO 527-2  |
| Yield                                    | 5.0                                | %                 |                       |
| Break                                    | 110                                | %                 |                       |
| Flexural Modulus                         | 2300                               | MPa               | ASTM D790, ISO 178    |
| Impact                                   | Nominal Value                      | Unit              | Test Method           |
| Notched Izod Impact                      |                                    |                   | ASTM D256             |
| -30°C, 3.20 mm                           | 380                                | J/m               |                       |
| 23°C, 3.20 mm                            | 470                                | J/m               |                       |
| Thermal                                  | Nominal Value                      | Unit              | Test Method           |
| Deflection Temperature Under Load        |                                    |                   |                       |
| 0.45 MPa, Unannealed                     | 122                                | °C                | ASTM D648, ISO 75-2/B |
| 1.8 MPa, Unannealed, 3.20 mm             | 100                                | °C                | ASTM D648             |
| 1.8 MPa, Unannealed                      | 100                                | °C                | ISO 75-2/A            |
| Vicat Softening Temperature              |                                    |                   |                       |

| --                     | 118                                | °C   | ASTM D1525, ISO 306/B50 2 <sup>1</sup>  |
|------------------------|------------------------------------|------|-----------------------------------------|
| --                     | 120                                | °C   | ASTM D1525, ISO 306/B120 3 <sup>2</sup> |
| Flammability           | Nominal Value                      |      | Test Method                             |
| Flame Rating (1.50 mm) | HB                                 |      | UL 94                                   |
| Injection              | Nominal Value                      | Unit |                                         |
| Drying Temperature     | 110                                | °C   |                                         |
| Drying Time            | 4.0                                | hr   |                                         |
| Rear Temperature       | 250                                | °C   |                                         |
| Middle Temperature     | 260                                | °C   |                                         |
| Front Temperature      | 270                                | °C   |                                         |
| Nozzle Temperature     | 260                                | °C   |                                         |
| Processing (Melt) Temp | 240 to 280                         | °C   |                                         |
| Mold Temperature       | 70.0 to 100                        | °C   |                                         |
| NOTE                   |                                    |      |                                         |
| 1.                     | Rate A (50°C/h), Loading 2 (50 N)  |      |                                         |
| 2.                     | Rate B (120°C/h), Loading 2 (50 N) |      |                                         |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

