# Elastollan® C85A10

Thermoplastic Polyurethane Elastomer (Polyester)

BASF Corp. Thermoplastic Polyurethanes

## Message:

Elastollan® C85A exhibits excellent abrasion resistance and toughness, good hydrolytic stability, good heat, oil, fuel and solvent resistance. It has excellent damping characteristics and outstanding resistance to tear propagation. Elastollan® C85A is rated UL-94 HB in vertical flame test for wall thicknesses of 0.9 and 3.0 mm. Elastollan® C85A is supplied uncolored in diced or pelletized form.

| General Information | |
|---|---|
| Features | Good Abrasion Resistance<br>Good Tear Strength<br>Good Toughness<br>High Heat Resistance<br>Hydrolytically Stable<br>Solvent Resistant |
| Appearance | Colorless |
| Processing Method | Extrusion<br>Injection Molding |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Specific Gravity | 1.19 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (200°C/21.6 kg) | 20 to 60 | g/10 min | ASTM D1238 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Durometer Hardness (Shore A) | 85 | | ASTM D2240 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus (Injection Molded) | 20.7 | MPa | ASTM D412 |
| Flexural Modulus (Injection Molded) | 24.8 | MPa | ASTM D790 |
| Taber Abrasion Resistance | 25.0 | mg | ASTM D1044 |
| Abrasion - DIN | 25 | mm³ | DIN 53516 |
| Softening Point - DMA | 100 | °C | Internal Method |
| **Elastomers** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Stress | | | ASTM D412 |
| 100% Strain | 6.89 | MPa | |
| 300% Strain | 15.2 | MPa | |
| Tensile Strength | 41.4 | MPa | ASTM D412 |
| Tensile Elongation (Break) | 590 | % | ASTM D412 |
| Tear Strength [1] | 109 | kN/m | ASTM D624 |
| Compression Set | | | ASTM D395B |
| 23°C, 22 hr | 25 | % | |

| | | | |
|---|---|---|---|
| 70°C, 22 hr | 35 | % | |
| Thermal | Nominal Value | Unit | Test Method |
| Glass Transition Temperature | -40.0 | °C | Internal Method |
| Vicat Softening Temperature | 110 | °C | ASTM D1525 |
| Flammability | Nominal Value | | Test Method |
| Flame Rating | | | UL 94 |
| 0.900 mm | HB | | |
| 3.00 mm | HB | | |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 100 to 110 | °C | |
| Drying Time | 2.0 to 3.0 | hr | |
| Suggested Max Moisture | 0.030 | % | |
| Rear Temperature | 190 to 220 | °C | |
| Middle Temperature | 190 to 220 | °C | |
| Front Temperature | 190 to 220 | °C | |
| Nozzle Temperature | 210 to 225 | °C | |
| Extrusion | Nominal Value | Unit | |
| Drying Temperature | 100 to 110 | °C | |
| Drying Time | 2.0 to 3.0 | hr | |
| Cylinder Zone 1 Temp. | 160 to 200 | °C | |
| Cylinder Zone 3 Temp. | 160 to 200 | °C | |
| Cylinder Zone 5 Temp. | 160 to 200 | °C | |
| Adapter Temperature | 175 to 200 | °C | |
| Die Temperature | 175 to 205 | °C | |
| NOTE | | | |
| 1. | Die C | | |



## 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

WECHAT