

Tecoflex® TPU – 40% Barium Sulfate

Type: Medical Grade Aliphatic Polyether- based Thermoplastic Polyurethanes (TPUs) with 40% loading of Barium Sulfate

Features: Variety of hardnesses, offers an inherent ultraviolet (UV) stability that resists yellowing by aging and sterilization, good mechanical properties, radiopaque and can be color-matched

Process: Extrusion or Injection Molding

| Products & Properties | ASTM Test | EG-80A-B40 | EG-85A-B40 | EG-93A-B40 | EG-100A-B40 | EG-60D-B40 | EG-65D-B40 | EG-72D-B40 |
|-----------------------------------|-----------|------------|------------|------------|-------------|------------|------------|------------|
| Durometer (Shore Hardness) | D2240 | 78A | 86A | 95A | 98A | 65D | 78D | 82D |
| Specific Gravity | D792 | 1.48 | 1.50 | 1.52 | 1.53 | 1.53 | 1.54 | 1.55 |
| Flexural Modulus (psi) | D790 | 1,500 | 3,700 | 4,700 | 14,000 | 27,000 | 97,000 | 179,000 |
| Ultimate Tensile (psi) | D412 | 4,700 | 4,900 | 6,500 | 6,600 | 6,800 | 6,200 | 5,700 |
| Ultimate Elongation (%) | D412 | 660 | 590 | 430 | 390 | 370 | 330 | 190 |
| Tensile Modulus (psi) | D412 | | | | | | | |
| at 100% Elongation | | 500 | 900 | 1,400 | 2,100 | 2,200 | 3,000 | 4,300 |
| at 200% Elongation | | 900 | 1,400 | 2,000 | 2,700 | 2,900 | 3,500 | NA |
| at 300% Elongation | | 1,200 | 1,800 | 3,100 | 4,300 | 4,700 | 5,300 | NA |
| Mold Shrinkage (in/in) | D955 | .008-.012 | .008-.012 | .006-.010 | .006-.010 | .004-.008 | .004-.008 | .004-.006 |

Note: These test results are based on small samples of Tecoflex® polyurethanes and do not necessarily represent average results from larger test samples. This information should not be used for establishing engineering or manufacturing guidelines.

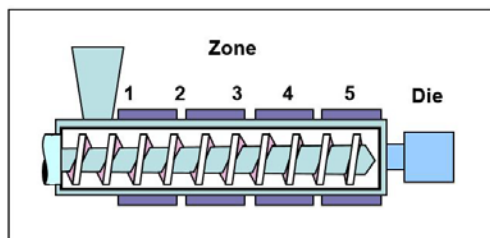
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HANDLING CONSIDERATIONS

Properties of all thermoplastic polyurethane products in the molten state are adversely affected by moisture. For best results, always dry the material at least two hours at 65.5°C (150°F) or overnight at 54.4°C (130°F) in a machine mounted dehumidifying dryer (a desiccant dryer delivering air at 1 liter/sec/ kg at -40°C dew point (1 cfm/lb at -40°F dew point)). A dehumidifying dryer hopper or one shot loader is also recommended. Depending on the applied processing technique, the maximum moisture level should be 0.05%. Never exceed 500°F (270°C) melt temperature!

Processing Conditions: Tecoflex® TPU's can be processed on any conventional extruder or molder

Recommended Starting Extrusion Temperature Profile:

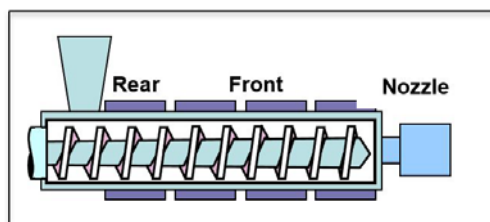


| | EG-80A-B40 | EG-85A-B40 | EG-93A-B40 | EG-100A-B40 | EG-60D-B40 | EG-65D-B40 | EG-68D-B40 | EG-72D-B40 |
|------------------|------------|------------|------------|-------------|------------|------------|------------|------------|
| | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C |
| Zone 1 | 340/171.1 | 340/171.1 | 340/171.1 | 350/176.6 | 350/176.6 | 350/176.6 | 350/176.6 | 360/182.8 |
| Zone 2 | 350/176.6 | 350/176.6 | 350/176.6 | 360/182.8 | 360/182.8 | 360/182.8 | 360/182.8 | 370/187.7 |
| Zone 3 | 360/182.8 | 360/182.8 | 360/182.8 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 380/193.3 |
| Zone 4 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 390/198.8 |
| Adapter 5 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 370/187.7 | 390/198.8 |
| Die | 370/187.7 | 370/187.7 | 370/187.7 | 380/193.3 | 380/193.3 | 380/193.3 | 380/193.3 | 390/198.8 |

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Screen Pack Recommendation: 100/500/250

Recommended Starting Injection Molding Temperature Profile:



| | EG-80A-B40 | EG-85A-B40 | EG-93A-B40 | EG-100A-B40 | EG-60D-B40 | EG-65D-B40 | EG-72D-B40 |
|---------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|
| | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C | °F/°C |
| Rear | 310/154.4 | 325/162.7 | 325/162.7 | 325/162.7 | 360/182.2 | 375/190.5 | 375/190.5 |
| Front | 325/162.7 | 325/162.7 | 325/162.7 | 350/176.6 | 375/190.5 | 390/198.8 | 410/210 |
| Nozzle | 335/168.3 | 335/168.3 | 335/168.3 | 360/182.2 | 380/193.3 | 400/204.4 | 410/510 |
| Melt | <380/<193.3 | <380/<193.3 | <385/<196.1 | <410/<210 | <410/<210 | <430/<221.1 | <440/<226.6 |
| Mold | 40-80/4.4-26.6 | 40-80/4.4-26.6 | 50-100/10-37.7 | 50-110/10-43.3 | 50-120/10-48.8 | 50-120/10-48.8 | 50-130/10-54.4 |

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