

## Technical Data Sheet

### Softflex 8103

Thermoplastic Elastomer  
LyondellBasell Industries  
Engineering Plastics

| General                                                      |                         |                         |             |
|--------------------------------------------------------------|-------------------------|-------------------------|-------------|
| Uses                                                         | • Overmolding           |                         |             |
| Physical                                                     | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Density / Specific Gravity                                   | 1.12                    | 1.12 g/cm <sup>3</sup>  | ASTM D792   |
| Melt Mass-Flow Rate (MFR) <sup>1</sup> (235°C/1.0 Kg)        | 42 g/10 min             | 42 g/10 min             | ASTM D1238  |
| Mechanical                                                   | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Tensile Modulus                                              | 4210 psi                | 29.0 MPa                | ASTM D638   |
| Flexural Modulus                                             | 3550 psi                | 24.5 MPa                | ASTM D790   |
| Taber Abrasion Resistance<br>1000 Cycles, 1000 G, H-22 Wheel | 146 mg                  | 146 mg                  | ASTM D3389  |
| Elastomers                                                   | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Tensile Set (100% Strain)                                    | 108 %                   | 108 %                   | ASTM D412   |
| Tensile Stress                                               |                         |                         | ASTM D412   |
| 50% Strain                                                   | 3.51 psi                | 0.0242 MPa              |             |
| 100% Strain                                                  | 4.28 psi                | 0.0295 MPa              |             |
| 300% Strain                                                  | 6.22 psi                | 0.0429 MPa              |             |
| Tensile Elongation (Break)                                   | 970 %                   | 970 %                   | ASTM D412   |
| Tear Strength                                                | 364 lbf/in              | 63.7 kN/m               | ASTM D624   |
| Compression Set                                              |                         |                         | ASTM D395B  |
| 73°F (23°C), 22 Hr                                           | 6.0 %                   | 6.0 %                   |             |
| 158°F (70°C), 22 Hr                                          | 75 %                    | 75 %                    |             |
| 212°F (100°C), 22 Hr                                         | 92 %                    | 92 %                    |             |
| Impact                                                       | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Gardner Impact                                               | > 320 in·lb             | > 36.2 J                | ASTM D3029  |
| Hardness                                                     | Nominal Value (English) | Nominal Value (SI)      | Test Method |
| Durometer Hardness                                           |                         |                         | ASTM D2240  |
| Shore A                                                      | 74 to 84                | 74 to 84                |             |
| Shore A, 10 Sec                                              | 70 to 80                | 70 to 80                |             |
| Additional Information                                       | Nominal Value (English) | Nominal Value (SI)      |             |
| Overmold Bonding                                             | ABS, PC, ABS/PC,<br>PPO | ABS, PC, ABS/PC,<br>PPO |             |

#### Notes

<sup>1</sup> Procedure A

#### Notes

These are typical property values not to be construed as specification limits.