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# Hytrel® HTR3048 BK459 (PRELIMINARY)

## THERMOPLASTIC POLYESTER ELASTOMER

Hytrel® HTR3048 BK459 is a Low Modulus High Performance Polyester Elastomer Developed for Air Bag Door Applications

### Product information

| | | | |
|---|---|---|---|
| Resin Identification | TPC-ET | | ISO 1043 |
| Part Marking Code | >TPC-ET< | | ISO 11469 |

### Rheological properties

| | | | |
|---|---|---|---|
| Moulding shrinkage, parallel | 0.7 | % | ISO 294-4, 2577 |
| Moulding shrinkage, normal | 0.5 | % | ISO 294-4, 2577 |

### Typical mechanical properties

| | | | |
|---|---|---|---|
| Tensile modulus | 21 | MPa | ISO 527-1/-2 |
| Stress at 10% strain | 2 | MPa | ISO 527-1/-2 |
| Tensile stress at break | 20 | MPa | ISO 527-1/-2 |
| Tensile strain at break | >300 | % | ISO 527-1/-2 |
| Charpy notched impact strength, -30°C | N | kJ/m² | ISO 179/1eA |
| Shore D hardness, 15s | 25 | | ISO 48-4 / ISO 868 |
| Shore D hardness, max | 29 | | ISO 868 |
| Tear strength, parallel | 73 | kN/m | ISO 34-1 |

### Thermal properties

| | | | |
|---|---|---|---|
| Melting temperature, 10°C/min | 176 | °C | ISO 11357-1/-3 |
| Vicat softening temperature, 50°C/h 10N | 72 | °C | ISO 306 |

### Flammability

| | | | |
|---|---|---|---|
| FMVSS Class | B | | ISO 3795 (FMVSS 302) |
| Burning rate, Thickness 1 mm | <80 | mm/min | ISO 3795 (FMVSS 302) |

### Physical/Other properties

| | | | |
|---|---|---|---|
| Density | 1080 | kg/m³ | ISO 1183 |

### Injection

| | | |
|---|---|---|
| Drying Recommended | yes | |
| Drying Temperature | 80 | °C |
| Drying Time, Dehumidified Dryer | 2 - 4 | h |
| Processing Moisture Content | ≤0.08 | % |
| Melt Temperature Optimum | 205 | °C |
| Min. melt temperature | 195 | °C |
| Max. melt temperature | 210 | °C |
| Mold Temperature Optimum | 30 | °C |
| Min. mould temperature | 30 | °C |
| Max. mould temperature | 40 | °C |

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## Characteristics

| | |
|---|---|
| Processing | Injection Moulding, Film Extrusion, Sheet Extrusion |
| Delivery form | Pellets |



Revised: 2025-04-22 Source: Celanese Materials Database