

# 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/m <sup>2</sup> | 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/m <sup>3</sup> | 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   |

The above data are preliminary and are subject to change as additional data are developed on subsequent lots.

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