

EPDM 50 Black - Flame retardant 5051911227

The compound is based on an ultra high molecular weight EPDM, this type of polymer is specifically designed for use in dynamic applications. The flame retardant properties are derived from a particular additive known to reduce flame spread and inhibit smoke generation.

| | |
|---------------------------|---------------------|
| Press Cure | 12 minutes @ 165 °C |
| Post Cure | N/a |
| Service Temperature Range | - 50°C to 120°C |

Original Properties

| | Units | Typical Result |
|---------------------|---------|----------------|
| Hardness | Shore A | 44 |
| Tensile Strength | MPa | 11.5 |
| Modulus at 100% | MPa | 0.8 |
| Modulus at 300% | MPa | 0.9 |
| Elongation to Break | % | 767 |

Hot air resistance after 70hrs @ 100 °C
ISO 188: 2011

| | Units | Typical Result |
|----------------------------|---------|----------------|
| Hardness change | Shore A | +1 |
| Tensile Strength change | % | +4 |
| Elongation to Break change | % | -12 |
| Modulus at 100% | MPa | 0.9 |
| Modulus at 300% | MPa | 1.1 |

Hot air resistance after 70hrs @ 125 °C
ISO 188: 2011

| | Units | Typical Result |
|----------------------------|---------|----------------|
| Hardness change | Shore A | +4 |
| Tensile Strength change | % | -10 |
| Elongation to Break change | % | -9 |
| Modulus at 100% | MPa | 1.0 |
| Modulus at 300% | MPa | 1.4 |

Hot air resistance after 168hrs @ 100 °C
ISO 188: 2011

| | Units | Typical Result |
|----------------------------|---------|----------------|
| Hardness change | Shore A | +3 |
| Tensile Strength change | % | +5 |
| Elongation to Break change | % | -9 |
| Weight loss | % | 0 |
| Modulus at 100% | MPa | 0.9 |
| Modulus at 300% | MPa | 1.1 |

Hot air resistance after 168hrs @ 125 °C
ISO 188: 2011

| | Units | Typical Result |
|----------------------------|---------|----------------|
| Hardness change | Shore A | +7 |
| Tensile Strength change | % | -51 |
| Elongation to Break change | % | -18 |
| Weight loss | % | -3 |
| Modulus at 100% | MPa | 1.2 |
| Modulus at 300% | MPa | 2.0 |

Compression set after 70h @ 100 °C
ISO 815-1: 2014

| | Units | Typical Result |
|-----|-------|----------------|
| Set | % | 44 |

Compression set after 70h @ 125 °C
ISO 815-1: 2014

| | Units | Typical Result |
|-----|-------|----------------|
| Set | % | 60 |

IMPORTANT NOTE

All information based on judgment is offered in good faith. Where no empirical data for the compound exists Clwyd Compounds Ltd. accepts no liability express or implied as to its validity.

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