

## Technical Data Sheet - Preliminary Product

❖ **Alfater XL<sup>®</sup>****MOCOM****ALFATER XL D40I 3EF0010**

|                      |                                                                                                                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Base Polymer         | Thermoplastic Vulcanisate (PP+EPDM)                                                                                                                                                                                                                                     |
| Colour               | black                                                                                                                                                                                                                                                                   |
| Service Temperature  | max. range (depending on load, geometry, etc.) -40-125 °C                                                                                                                                                                                                               |
| Special Features     | easy flow,high surface quality,black fulfills weathering dry, hot (Kalahari, PV3929),black fulfills weathering moist, hot (Florida, PV3930),good weathering resistance,good chemical resistance,good ozone resistance,good hot air resistance,good hydrolysis resistant |
| Market Segment       | Automotive,building and construction,do-it-yourself,electrical and electronic,sport and leisure,Furniture                                                                                                                                                               |
| Application Area     | injection moulded parts                                                                                                                                                                                                                                                 |
| Typical Applications | seals,sealing lip,handles,impact protection / shock absorber,protection caps,thin walled parts,profile,cable ducts,2K components,casters                                                                                                                                |
| Adhesion to          | Polypropylene Homopolymer,Polypropylene Copolymer,Polyethylene,Thermoplastic Vulcanisate (PP+EPDM),Thermoplastic Olefin Elastomer,Thermoplastic Elastomer general                                                                                                       |

|                               |                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pre-Drying Conditions         | in a dry air (dessiccant) dryer 70-80 °C<br>for 2-4 h<br>max. moisture content <0,10 %                                                                                          |
| Processing Injection Moulding | melt temperature 195-230 °C<br>mould temperature 10-70 °C<br>injection speed middle - high<br>back pressure (hydraulic) >3 bar<br>holding pressure 50-70% of injection pressure |
| Storage                       | dry, protected from light<br>tightly sealed                                                                                                                                     |

| Properties                                    | Value | Dimension | Test Norm |
|-----------------------------------------------|-------|-----------|-----------|
| <b>Mechanical Properties</b>                  |       |           |           |
| Tensile Stress at 100% Elongation (Type 2)    | 10    | MPa       | ISO 37    |
| Tensile Strength (Type 2)                     | 12    | MPa       | ISO 37    |
| Tear Strength (Method Ba)                     | 62    | kN/m      | ISO 34-1  |
| Elongation at Break (Type 2)                  | 500   | %         | ISO 37    |
| Shore Hardness D (15s)                        | 40    | -         | ISO 868   |
| <b>Thermal Properties</b>                     |       |           |           |
| Compression Set (22h / 100 °C / 25% / Type A) | 77    | %         | ISO 815   |
| Compression Set (22h / 70 °C / 25% / Type A)  | 65    | %         | ISO 815   |
| Compression Set (72h / 22 °C / 25% / Type A)  | 46    | %         | ISO 815   |
| Compression Set (72h / 125 °C / 25% / Type A) | 95    | %         | ISO 815   |

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### Electrical Properties

|                           |     |   |           |
|---------------------------|-----|---|-----------|
| Tracking Resistance (CTI) | 600 | - | IEC 60112 |
|---------------------------|-----|---|-----------|

### Rheological Properties

|                                   |           |    |           |
|-----------------------------------|-----------|----|-----------|
| Shrinkage (lengthwise, 24h)       | 1.2 - 1.6 | %  | ISO 294-4 |
| Shrinkage (lateral, 24h)          | 0.8 - 1.2 | %  | ISO 294-4 |
| Spiral Flow (2 mm wall thickness) | 65        | cm | -         |

### Physical Properties

|         |     |                   |          |
|---------|-----|-------------------|----------|
| Density | 960 | kg/m <sup>3</sup> | ISO 1183 |
|---------|-----|-------------------|----------|

### Ageing Properties

|                             |        |   |             |
|-----------------------------|--------|---|-------------|
| Ozone resistance (method A) | passed | - | ISO 1431-1A |
|-----------------------------|--------|---|-------------|

### Diagrams

#### Specific volume-temperature (pvT)

