

## Technical Data Sheet

# ❖ Alfater XL®

# MOCOM

## ALFATER XL A80I 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,soft touch elements,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 190-220 °C<br>mould temperature 10-60 °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>not above 30°C<br>tightly sealed                                                                                                                   |

| Properties                                    | Value | Dimension | Test Norm |
|-----------------------------------------------|-------|-----------|-----------|
| <b>Mechanical Properties</b>                  |       |           |           |
| Tensile Stress at 100% Elongation (Type 2)    | 4     | MPa       | ISO 37    |
| Tensile Strength (Type 2)                     | 6.5   | MPa       | ISO 37    |
| Tear Strength (Method Ba)                     | 33    | kN/m      | ISO 34-1  |
| Elongation at Break (Type 2)                  | 450   | %         | ISO 37    |
| Shore Hardness A (15s)                        | 80    | -         | ISO 868   |
| <b>Thermal Properties</b>                     |       |           |           |
| Brittleness Temperature (method B)            | -64   | °C        | ISO 812   |
| Compression Set (22h / 100 °C / 25% / Type A) | 54    | %         | ISO 815   |
| Compression Set (22h / 70 °C / 25% / Type A)  | 45    | %         | ISO 815   |
| Compression Set (72h / 22 °C / 25% / Type A)  | 30    | %         | ISO 815   |

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|-----------------------------------------------|-----------|-------------------|------------------|
| Compression Set (72h / 125 °C / 25% / Type A) | 69        | %                 | ISO 815          |
| <b>Electrical Properties</b>                  |           |                   |                  |
| Surface Resistance                            | 1E12      | Ohm               | DIN EN 62631-3-2 |
| Tracking Resistance (CTI)                     | 600       | -                 | IEC 60112        |
| <b>Rheological Properties</b>                 |           |                   |                  |
| Shrinkage (lengthwise, 24h)                   | 1.1 - 1.5 | %                 | ISO 294-4        |
| Shrinkage (lateral, 24h)                      | 0.9 - 1.3 | %                 | ISO 294-4        |
| Spiral Flow (2 mm wall thickness)             | 75        | cm                | -                |
| <b>Physical Properties</b>                    |           |                   |                  |
| Density                                       | 940       | kg/m <sup>3</sup> | ISO 1183         |
| <b>Ageing Properties</b>                      |           |                   |                  |
| Ozone resistance (method A)                   | passed    | -                 | ISO 1431-1A      |
| <b>Flammability</b>                           |           |                   |                  |
| Flammability (1.5 mm)                         | HB        | class             | UL 94            |
| Flammability (3.0 mm)                         | HB        | class             | UL 94            |
| Glow Wire (GWFI, 650 °C, 2.0mm)               | passed    | -                 | DIN EN 60695     |

## Diagrams

### Specific volume-temperature (pvT)

