

## Technical Data Sheet - Preliminary Product

# ❖ Alfater XL®



## ALFATER XL A90I 4FC0010

### MOCOM

|                      |                                                                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Base Polymer         | Thermoplastic Vulcanisate (PP+EPDM)                                                                                                                                                            |
| Colour               | natural color, bright inherent color                                                                                                                                                           |
| Service Temperature  | max. range (depending on load, geometry, etc.) -40-125 °C                                                                                                                                      |
| Special Features     | food contact, compliant EN 71-3, good colorability, good weathering resistance, good chemical resistance, good ozone resistance, good hot air resistance, good hydrolysis resistant, easy flow |
| Market Segment       | packaging, household goods, food processing industry, toys                                                                                                                                     |
| Application Area     | injection moulded parts                                                                                                                                                                        |
| Typical Applications | seals, sealing lip, handles, soft touch elements, protection caps, caps / closures, containers, kitchen ware, 2K components                                                                    |

|                               |                                                                                                                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                     |
| Minimum Shelf Life            | months <12                                                                                                                                                                      |

| Properties                                    | Value | Dimension | Test Norm |
|-----------------------------------------------|-------|-----------|-----------|
| <b>Mechanical Properties</b>                  |       |           |           |
| Tensile Stress at 100% Elongation (Type 2)    | 5.5   | MPa       | ISO 37    |
| Tensile Strength (Type 2)                     | 6.2   | MPa       | ISO 37    |
| Tear Strength (Method Ba)                     | 46    | kN/m      | ISO 34-1  |
| Elongation at Break (Type 2)                  | 200   | %         | ISO 37    |
| Shore Hardness A (15s)                        | 90    | -         | ISO 868   |
| <b>Thermal Properties</b>                     |       |           |           |
| Compression Set (22h / 100 °C / 25% / Type A) | 72    | %         | ISO 815   |
| Compression Set (22h / 70 °C / 25% / Type A)  | 64    | %         | ISO 815   |
| Compression Set (72h / 22 °C / 25% / Type A)  | 46    | %         | ISO 815   |
| Compression Set (72h / 125 °C / 25% / Type A) | 84    | %         | ISO 815   |
| <b>Electrical Properties</b>                  |       |           |           |
| Tracking Resistance (CTI)                     | 600   | -         | IEC 60112 |

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#### Rheological Properties

|                                   |           |    |           |
|-----------------------------------|-----------|----|-----------|
| Shrinkage (lengthwise, 24h)       | 1.4 - 1.8 | %  | ISO 294-4 |
| Shrinkage (lateral, 24h)          | 1.1 - 1.5 | %  | ISO 294-4 |
| Spiral Flow (2 mm wall thickness) | 82        | cm | -         |

#### Physical Properties

|         |     |                   |          |
|---------|-----|-------------------|----------|
| Density | 940 | kg/m <sup>3</sup> | ISO 1183 |
|---------|-----|-------------------|----------|

#### Ageing Properties

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