



# Desmopan W DP89085A

W8000 grade series, aliphatics / Shore hardness A 85 - 89

injection molding grade; no yellowing under the action of UV light; very good hydrolysis and microbial resistance; good low-temperature flexibility; high rebound resilience; low abrasion; colored applications in the automotive, sports and leisure sectors

## ISO Shortname

| Property                                        | Test Condition | Unit              | Standard          | Value          |          |      |
|-------------------------------------------------|----------------|-------------------|-------------------|----------------|----------|------|
|                                                 |                |                   |                   | drying         | annealed | -    |
|                                                 |                |                   |                   | according to   |          |      |
|                                                 |                |                   |                   | specifications |          |      |
| <b>Mechanical properties (23 °C/50 % r. h.)</b> |                |                   |                   |                |          |      |
| C shore hardness, method A                      |                | -                 | ISO 868           |                | 86       |      |
| C Ultimate tensile strength                     | 200 mm/min     | MPa               | acc. ISO 527-1,-3 |                | 33       |      |
| C Elongation at break                           | 200 mm/min     | %                 | acc. ISO 527-1,-3 |                | 750      |      |
| C Stress at 100 % strain                        | 200 mm/min     | MPa               | acc. ISO 527-1,-3 |                | 7        |      |
| C Stress at 300 % strain                        | 200 mm/min     | MPa               | acc. ISO 527-1,-3 |                | 10       |      |
| C Compression set                               | 24 h; 70 °C    | %                 | ISO 815           |                | 44       |      |
| C Compression set                               | 72 h; 23 °C    | %                 | ISO 815           |                | 18       |      |
| C Abrasion resistance                           |                | mm <sup>3</sup>   | ISO 4649          |                | 31       |      |
| Impact resilience                               |                | %                 | ISO 4662          |                | 64       |      |
| Tear propagation resistance                     | 500 mm/min     | kN/m              | ISO 34-1          |                | 42       |      |
| <b>Thermal properties</b>                       |                |                   |                   |                |          |      |
| Torsional storage modulus                       | -20 °C         | MPa               | ISO 6721-2        |                | 150      |      |
| Torsional storage modulus                       | 23 °C          | MPa               | ISO 6721-2        |                | 30       |      |
| Torsional storage modulus                       | 70 °C          | MPa               | ISO 6721-2        |                | 40       |      |
| Tensile storage modulus                         | -20 °C         | MPa               | ISO 6721-1,-4     |                | 260      |      |
| Tensile storage modulus                         | 20 °C          | MPa               | ISO 6721-1,-4     |                | 65       |      |
| Tensile storage modulus                         | 60 °C          | MPa               | ISO 6721-1,-4     |                | 50       |      |
| <b>Other properties (23 °C)</b>                 |                |                   |                   |                |          |      |
| C Density                                       |                | kg/m <sup>3</sup> | ISO 1183          |                |          | 1080 |
| <b>Molding conditions</b>                       |                |                   |                   |                |          |      |
| Injection molding-Melt temperature              |                | °C                | -                 | 200 - 220      |          |      |
| Injection molding-Mold temperature              |                | °C                | -                 | 20 - 40        |          |      |
| Maximum drying temperature                      |                | °C                | -                 |                |          | 80   |

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.