

# Desmopan 460

400 grade series, ester / Shore hardness D 60 - 64

injection molding grade; grease and oil-resistant; low compression set; good heat resistance; high elasticity; short cycle times; Application; Automotive engineering; Technical parts; Bearing bushes

## ISO Shortname

| Property                                 | Test Condition | Unit  | Standard      | Value                       |          |         |
|------------------------------------------|----------------|-------|---------------|-----------------------------|----------|---------|
|                                          |                |       |               | drying                      | annealed | -       |
|                                          |                |       |               | according to specifications |          |         |
| Mechanical properties (23 °C/50 % r. h.) |                |       |               |                             |          |         |
| C shore hardness, method A               |                | -     | ISO 868       |                             | 97       |         |
| C shore hardness, method D               |                | -     | ISO 868       |                             | 59       |         |
| Ultimate tensile strength                | 200 mm/min     | MPa   | DIN 53504     |                             | 42,5     |         |
| Strain at break                          | 200 mm/min     | %     | DIN 53504     |                             | 390      |         |
| Stress at 10 % strain                    | 200 mm/min     | MPa   | DIN 53504     |                             | 15,1     |         |
| Stress at 50 % strain                    | 200 mm/min     | MPa   | DIN 53504     |                             | 22,5     |         |
| Stress at 300 % strain                   | 200 mm/min     | MPa   | DIN 53504     |                             | 35,1     |         |
| C Compression set                        | 24 h; 70 °C    | %     | ISO 815       |                             | 35       |         |
| C Compression set                        | 72 h; 23 °C    | %     | ISO 815       |                             | 25       |         |
| C Abrasion resistance                    |                | mm³   | ISO 4649      |                             | 40       |         |
| Impact resilience                        |                | %     | ISO 4662      |                             | 35       |         |
| Tear propagation resistance              | 500 mm/min     | kN/m  | ISO 34-1      |                             | 150      |         |
| Flexural modulus                         | 2 mm/min       | MPa   | ISO 178       |                             | 170      |         |
| Thermal properties                       |                |       |               |                             |          |         |
| Tensile storage modulus                  | -20 °C         | MPa   | ISO 6721-1,-4 |                             | 1760     |         |
| Tensile storage modulus                  | 20 °C          | MPa   | ISO 6721-1,-4 |                             | 446      |         |
| Tensile storage modulus                  | 60 °C          | MPa   | ISO 6721-1,-4 |                             | 130      |         |
| Other properties (23 °C)                 |                |       |               |                             |          |         |
| C Density                                |                | kg/m³ | ISO 1183-1    |                             |          | 1220    |
| Molding conditions                       |                |       |               |                             |          |         |
| Injection molding-Melt temperature       |                | °C    | -             | 235 - 245                   |          |         |
| Injection molding-Mold temperature       |                | °C    | -             |                             |          | 20 - 40 |
| Maximum drying temperature               |                | °C    | -             |                             |          | 110     |

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.

Impact properties: N = non-break, P = partial break, C = complete break

