

Durethan AKV25H3.0LT 904040

PA 66, 25% glass fibers, injection molding, heat-aging stabilized, NIR-laser transparent coloring (black)

ISO Shortname: ISO 16396-PA 66,GF25,GHR,S14-080

| Rheological properties SOURCE | Property | Test Condition | Unit | Standard | guide value d.a.m. | cond. |
|---|---|----------------------|---------------------|----------------|--------------------------|-------|
| Critical Stress Constraint Constant Constraint Cons | Rheological properties | | | | u.u.m. | cond. |
| °C; 600 bar Post-shrinkage, parallel 60x60x2; 120 °C; 4 h % ISO 294-4 0.1 Mechanical properties (23 °C/50 % r. h.) CTensile modulus 1 mm/min MPa ISO 527-1-2 8400 6000 CTensile Stress at break 5 mm/min MPa ISO 527-1-2 160 115 CTensile Stress at break 5 mm/min % ISO 527-1-2 3.0 6.0 CCharpy impact strength 23 °C kJ/m² ISO 179-16U 60 80 CCharpy othed impact strength 23 °C kJ/m² ISO 179-16A 10 12 CCharpy notched impact strength 23 °C kJ/m² ISO 179-16A <10 | C Molding shrinkage, parallel | | % | ISO 294-4 | 0.5 | |
| Post-shrinkage, transverse 60x60x2; 120 °C; 4 h % ISO 294-4 0.1 Mechanical properties (23 °C/50 % r. h.) CTensile modulus 1 mm/min MPa ISO 527-1,-2 8400 6000 Cressile modulus 1 mm/min MPa ISO 527-1,-2 160 115 Cressile Strain at break 5 mm/min % ISO 179-16U 60 80 Charpy inpact strength 23 °C kJ/m² ISO 179-16U 60 80 Charpy notched impact strength 23 °C kJ/m² ISO 179-16A 10 12 Charpy notched impact strength 23 °C kJ/m² ISO 179-16A 10 <10 Izod impact strength 23 °C kJ/m² ISO 179-16A <10 <10 Charpy notched impact strength -30 °C kJ/m² ISO 180-10 <0 <10 Izod notched impact strength -30 °C kJ/m² ISO 180-1A <10 <10 Izod notched impact strength -30 °C kJ/m² ISO 178-A 240 <10 Izod notched impa | C Molding shrinkage, transverse | | % | ISO 294-4 | 1.1 | |
| Mechanical properties (23 °C/50 % r. h.) CTensile modulus 1 mm/min MPa ISO 527-1,-2 8400 6000 CTensile Stress at break 5 mm/min MPa ISO 527-1,-2 160 115 CTensile Stress at break 5 mm/min MPa ISO 527-1,-2 3.0 6.0 CCharpy impact strength 23 °C kJ/m² ISO 179-1eU 60 80 CCharpy inpact strength 23 °C kJ/m² ISO 179-1eJ 50 50 CCharpy notched impact strength -30 °C kJ/m² ISO 179-1eA 10 12 CCharpy notched impact strength -40 °C kJ/m² ISO 179-1eA 10 <10 | Post- shrinkage, parallel | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.1 | |
| C Tensile modulus 1 mm/min MPa ISO 527-1,-2 8400 6000 C Tensile Stress at break 5 mm/min MPa ISO 527-1,-2 160 115 C Tensile Strain at break 5 mm/min % ISO 527-1,-2 3.0 6.0 C Charpy impact strength 23 °C k.//m² ISO 179-16U 50 80 C Charpy notched impact strength -30 °C k.//m² ISO 179-16A 10 12 C Charpy notched impact strength -30 °C k.//m² ISO 179-16A <10 | Post- shrinkage, transverse | 60x60x2; 120 °C; 4 h | % | ISO 294-4 | 0.1 | |
| C Tensile Stress at break 6 mm/min MPa ISO 527-1,-2 160 115 C Tensile Strain at break 5 mm/min % ISO 527-1,-2 3.0 6.0 C Charpy impact strength 23 °C k.J/m² ISO 179-1eU 60 80 C Charpy inpact strength 30 °C k.J/m² ISO 179-1eU 50 50 C Charpy notched impact strength -30 °C k.J/m² ISO 179-1eA 10 12 C Charpy notched impact strength -30 °C k.J/m² ISO 179-1eA 10 <10 | Mechanical properties (23 °C/50 % r. h.) | | | | | |
| C Tensile Strain at break 5 mm/min % ISO 527-1,-2 3.0 6.0 C Charpy impact strength 23 °C k.//m² ISO 179-1eU 60 80 C Charpy impact strength 23 °C k.//m² ISO 179-1eU 50 50 C Charpy notched impact strength 23 °C k.//m² ISO 179-1eA 10 12 C Charpy notched impact strength -30 °C k.//m² ISO 179-1eA <10 | C Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 8400 | 6000 |
| C Charpy impact strength 23 °C kJ/m² ISO 179-1eU 60 80 C Charpy impact strength -30 °C kJ/m² ISO 179-1eU 50 50 C Charpy notched impact strength 23 °C kJ/m² ISO 179-1eA 10 12 C Charpy notched impact strength -30 °C kJ/m² ISO 179-1eA <10 | C Tensile Stress at break | 5 mm/min | MPa | ISO 527-1,-2 | 160 | 115 |
| C Charpy impact strength -30 °C kJ/m² ISO 179-1eU 50 50 C Charpy notched impact strength 23 °C kJ/m² ISO 179-1eA 10 12 C Charpy notched impact strength -30 °C kJ/m² ISO 179-1eA <10 | C Tensile Strain at break | 5 mm/min | % | ISO 527-1,-2 | 3.0 | 6.0 |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | C Charpy impact strength | 23 °C | kJ/m² | ISO 179-1eU | 60 | 80 |
| C Charpy notched impact strength -30 °C kJ/m² ISO 179-1eA <10 <10 Charpy notched impact strength -40 °C kJ/m² ISO 179-1eA <10 | C Charpy impact strength | -30 °C | kJ/m² | ISO 179-1eU | 50 | 50 |
| $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$ | C Charpy notched impact strength | 23 °C | kJ/m² | ISO 179-1eA | 10 | 12 |
| Izod impact strength 23 °C kJ/m² ISO 180-1U 50 Izod notched impact strength -30 °C kJ/m² ISO 180-1A < 10 | C Charpy notched impact strength | -30 °C | kJ/m² | ISO 179-1eA | < 10 | < 10 |
| Izod notched impact strength -30 °C kJ/m² ISO 180-1A < 10 < 10 Izod notched impact strength -40 °C kJ/m² ISO 180-1A < 10 | Charpy notched impact strength | -40 °C | kJ/m² | ISO 179-1eA | < 10 | < 10 |
| Izod notched impact strength -40 °C kJ/m² ISO 180-1A < 10 < 10 Flexural modulus 2 mm/min MPa ISO 178-A 7500 5000 Flexural strength 2 mm/min MPa ISO 178-A 240 170 Flexural strength 2 mm/min MPa ISO 178-A 240 170 Flexural stress at 3.5 % strain 2 mm/min % ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 220 145 Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties C ISO 11357-1,-3 263 263 C Temperature of deflection under load 0.45 MPa °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10°//K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10°//K | Izod impact strength | 23 °C | kJ/m² | ISO 180-1U | 50 | |
| Flexural modulus 2 mm/min MPa ISO 178-A 7500 5000 Flexural strength 2 mm/min MPa ISO 178-A 240 170 Flexural strength 2 mm/min MPa ISO 178-A 240 170 Flexural strength 2 mm/min MPa ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 220 145 Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties N/mm² ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 °/K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB | Izod notched impact strength | -30 °C | kJ/m² | ISO 180-1A | < 10 | < 10 |
| Flexural strength 2 mm/min MPa ISO 178-A 240 170 Flexural strain at flexural strength 2 mm/min % ISO 178-A 4.5 7.0 Flexural strength 2 mm/min MPa ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 220 145 Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties N/mm² ISO 75-1,-2 240 263 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 >250 Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 0.3 C Gouring behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm< °C | Izod notched impact strength | -40 °C | kJ/m² | ISO 180-1A | < 10 | < 10 |
| Flexural strain at flexural strength 2 mm/min % ISO 178-A 4.5 7.0 Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 220 145 Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties CMelting temperature 10 °C/min °C ISO 11357-1,-3 263 CTemperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 CTemperature of deflection under load 0.45 MPa °C ISO 306 > 230 CCoefficient of linear thermal expansion, parallel 23 to 55 °C 10°//K ISO 11359-1,-2 0.3 CCoefficient of linear thermal expansion, transverse 23 to 55 °C 10°//K ISO 11359-1,-2 1.1 CBurning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 CVicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) 2.0 mm ° | Flexural modulus | 2 mm/min | MPa | ISO 178-A | 7500 | 5000 |
| Flexural stress at 3.5 % strain 2 mm/min MPa ISO 178-A 220 145 Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties C Melting temperature 10 °C/min °C ISO 11357-1,-3 263 C Temperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 306 >230 Vicat softening temperature 50 N; 120 °C/h °C ISO 11359-1,-2 >250 Vicat softening temperature 50 N; 120 °C/h °C ISO 306 >230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 C Vicat softening temperature 50 N; 50 °C/h °C | Flexural strength | 2 mm/min | MPa | ISO 178-A | 240 | 170 |
| Ball indentation hardness N/mm² ISO 2039-1 210 120 Thermal properties C ISO 11357-1,-3 263 C C Temperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 C C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 240 C C Temperature of deflection under load 0.45 MPa °C ISO 306 > 230 C Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Cefficient of linear thermal expansion, parallel 23 to 55 °C 10 °/K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 °/K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C ISO 306 > 230 Electrical p | Flexural strain at flexural strength | 2 mm/min | % | ISO 178-A | 4.5 | 7.0 |
| Thermal properties C Melting temperature 10 °C/min °C ISO 11357-1,-3 263 C Temperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 >250 Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) 2.0 mm °C ISO 306 > 230 C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 602 | Flexural stress at 3.5 % strain | 2 mm/min | MPa | ISO 178-A | 220 | 145 |
| C Melting temperature 10 °C/min °C ISO 11357-1,-3 263 C Temperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 >250 Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C $10^4/K$ ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C $10^4/K$ ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C ISO 306 > 230 C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz 10 ⁴ IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 110 <t< td=""><td>Ball indentation hardness</td><td></td><td>N/mm²</td><td>ISO 2039-1</td><td>210</td><td>120</td></t<> | Ball indentation hardness | | N/mm² | ISO 2039-1 | 210 | 120 |
| C Temperature of deflection under load 1.80 MPa °C ISO 75-1,-2 240 C Temperature of deflection under load 0.45 MPa °C ISO 75-1,-2 >250 Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C ISO 306 > 230 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) 2.0 mm °C IEC 60695-2-12 650 C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 100 200< | Thermal properties | | | | | |
| C Temperature of deflection under load 0.45 MPa $^{\circ}$ C ISO 75-1,-2 >250 Vicat softening temperature 50 N; 120 $^{\circ}$ C/h $^{\circ}$ C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 $^{\circ}$ C 10^{4} /K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 $^{\circ}$ C 10^{4} /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm $^{\circ}$ C ISO 306 > 230 C Vicat softening temperature 50 N; 50 $^{\circ}$ C/h $^{\circ}$ C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 $^{\circ}$ C/h $^{\circ}$ C ISO 306 > 230 Electrical properties (23 $^{\circ}$ C/50 % r. h.) C IEC 60250 4.0 10 C Relative permittivity 100 Hz $-$ IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10^{-4} IEC 60250 110 2200 C Dissipation factor 1 MHz </td <td>C Melting temperature</td> <td>10 °C/min</td> <td>°C</td> <td>ISO 11357-1,-3</td> <td>263</td> <td></td> | C Melting temperature | 10 °C/min | °C | ISO 11357-1,-3 | 263 | |
| Vicat softening temperature 50 N; 120 °C/h °C ISO 306 > 230 C Coefficient of linear thermal expansion, parallel 23 to 55 °C $10^4/K$ ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C $10^4/K$ ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 200 750 | C Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 240 | |
| C Coefficient of linear thermal expansion, parallel 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 0.3 C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 200 750 | C Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | >250 | |
| C Coefficient of linear thermal expansion, transverse 23 to 55 °C 10 ⁴ /K ISO 11359-1,-2 1.1 C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 00 Hz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁴ IEC 60250 200 750 | Vicat softening temperature | 50 N; 120 °C/h | °C | ISO 306 | > 230 | |
| C Burning behavior UL 94 1.5 mm Class UL 94 HB Glow wire test (GWFI) 2.0 mm °C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C IEC 60250 4.0 10 C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁴ IEC 60250 200 750 | C Coefficient of linear thermal expansion, parallel | 23 to 55 °C | 10 ^{-₄} /K | ISO 11359-1,-2 | 0.3 | |
| Glow wire test (GWFI) 2.0 mm °C IEC 60695-2-12 650 C Vicat softening temperature 50 N; 50 °C/h °C ISO 306 > 230 Electrical properties (23 °C/50 % r. h.) C ISO 60250 4.0 10 C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10^4 IEC 60250 110 2200 C Dissipation factor 1 MHz 10^4 IEC 60250 200 750 | C Coefficient of linear thermal expansion, transverse | 23 to 55 °C | 10 ⁻⁴ /K | ISO 11359-1,-2 | 1.1 | |
| C Vicat softening temperature50 N; 50 °C/h°CISO 306> 230Electrical properties (23 °C/50 % r. h.)C Relative permittivity100 Hz-IEC 602504.010C Relative permittivity1 MHz-IEC 602504.04.0C Dissipation factor100 Hz 10^{-4} IEC 602501102200C Dissipation factor1 MHz 10^{-4} IEC 60250200750 | C Burning behavior UL 94 | 1.5 mm | Class | UL 94 | HB | |
| Electrical properties (23 °C/50 % r. h.) C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁴ IEC 60250 200 750 | Glow wire test (GWFI) | 2.0 mm | °C | IEC 60695-2-12 | 650 | |
| C Relative permittivity 100 Hz - IEC 60250 4.0 10 C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 4.0 C Dissipation factor 100 Hz 10 ⁻⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁻⁴ IEC 60250 200 750 | C Vicat softening temperature | 50 N; 50 °C/h | °C | ISO 306 | > 230 | |
| C Relative permittivity 1 MHz - IEC 60250 4.0 4.0 C Dissipation factor 100 Hz 10 ⁻⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁻⁴ IEC 60250 200 750 | Electrical properties (23 °C/50 % r. h.) | | | | | |
| C Dissipation factor 100 Hz 10 ⁻⁴ IEC 60250 110 2200 C Dissipation factor 1 MHz 10 ⁻⁴ IEC 60250 200 750 | C Relative permittivity | 100 Hz | - | IEC 60250 | 4.0 | 10 |
| C Dissipation factor 1 MHz 10 ⁻⁴ IEC 60250 200 750 | C Relative permittivity | 1 MHz | - | IEC 60250 | 4.0 | 4.0 |
| | C Dissipation factor | 100 Hz | 10 ⁻⁴ | IEC 60250 | 110 | 2200 |
| C Volume resistivity Ohm-m IEC 60093 1E13 1E10 | C Dissipation factor | 1 MHz | 10 ⁻⁴ | IEC 60250 | 200 | 750 |
| | C Volume resistivity | | Ohm⋅m | IEC 60093 | 1E13 | 1E10 |





X

Durethan AKV25H3.0LT 904040

| Property | Test Condition | Unit | Standard | guide value | cond. |
|--|----------------|--------|-------------------------|----------------|-------|
| C Surface resistivity | | Ohm | IEC 60093 | 1E14 | 1E12 |
| C Electric strength | 1 mm | kV/mm | IEC 60243-1 | 40 | 35 |
| C Comparative tracking index CTI | Solution A | Rating | IEC 60112 | 500 | |
| Other properties (23 °C) | | | | | |
| C Water absorption (Saturation value) | Water at 23 °C | % | ISO 62 | 6 | |
| C Water absorption (Equilibrium value) | 23 °C; 50 % RH | % | ISO 62 | 2.1 | |
| C Density | | kg/m³ | ISO 1183 | 1320 | |
| Bulk density | | kg/m³ | ISO 60 | 700 | |
| Processing conditions for test specimens | | | | | |
| C Injection molding-Melt temperature | | °C | ISO 294 | 290 | |
| C Injection molding-Mold temperature | | °C | ISO 294 | 80 | |
| Processing recommendations | | | | | |
| Drying temperature dry air dryer | | °C | - | 80 | |
| Drying time dry air dryer | | h | - | 2-6 | |
| Residual moisture content | | % | Acc. to Karl Fischer | 0.03-0.12 | 2 |
| Melt temperature (Tmin - Tmax) | | °C | - | 280-300 | |
| Mold temperature | | °C | - | 80-120 | |

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.



Y

Durethan AKV25H3.0LT 904040

Disclaimer

Disclaimer for commercial products

This information and our technical advice - whether verbal, in writing or by way of trials - are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided - especially that contained in our safety data and technical information sheets - and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with the current version of our General Conditions of Sale and Delivery.

Test values

Unless specified to the contrary, the values given have been established on standardized test specimens at room temperature. The figures should be regarded as guide values only and not as binding minimum values. Kindly note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mould/die, the processing conditions and the coloring.

Processing note

Under the recommended processing conditions small quantities of decomposition product may be given off during processing. To preclude any risk to the health and well-being of the machine operatives, tolerance limits for the work environment must be ensured by the provision of efficient exhaust ventilation and fresh air at the workplace in accordance with the Safety Data Sheet. In order to prevent the partial decomposition of the polymer and the generation of volatile decomposition products, the prescribed processing temperatures should not be substantially exceeded. Since excessively high temperatures are generally the result of operator error or defects in the heating system, special care and controls are essential in these areas.

Conditioning

Conditioning in accordance with ISO 1110 (70 °C; 62 % r.h.)

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