



Durethan® AKV25H3.0LT 904040 PA66-GF25

Envalior

Injection Molding, 25% Glass Reinforced, Heat Stabilized, Laser Transparent Black

ISO 1043 PA66-GF25

| Rheological properties | dry / cond | Unit | Test Standard |
|-----------------------------|------------|------|-----------------|
| ISO Data | | | |
| Molding shrinkage, parallel | 0.5 / * | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 1.1 / * | % | ISO 294-4, 2577 |

| Mechanical Properties | dry / cond | Unit | Test Standard |
|---|-------------|-------|---------------|
| ISO Data | | | |
| Tensile Modulus | 8400 / 6000 | MPa | ISO 527 |
| Stress at Break | 160 / 115 | MPa | ISO 527 |
| Strain at Break | 3 / 6 | % | ISO 527 |
| Impact Strength (Charpy), +23°C | 60 / 80 | kJ/m² | ISO 179/1eU |
| Impact Strength (Charpy), -30°C | 50 / 50 | kJ/m² | ISO 179/1eU |
| Notched Impact Strength (Charpy), +23°C | 10 / 12 | kJ/m² | ISO 179/1eA |
| Notched Impact Strength (Charpy), -30°C | - / 10 | kJ/m² | ISO 179/1eA |

| Thermal Properties | dry / cond | Unit | Test Standard |
|---|------------|-------|----------------|
| ISO Data | | | |
| Melting Temperature (10°C/min) | 263 / * | °C | ISO 11357-1/-3 |
| Temp. of deflection under load (1.80 MPa) | 240 / * | °C | ISO 75-1/-2 |
| Temp. of deflection under load (0.45 MPa) | 250 / * | °C | ISO 75-1/-2 |
| Coeff. of Linear Therm. Expansion, parallel | 30 / * | E-6/K | ISO 11359-1/-2 |
| Coeff. of Linear Therm. Expansion, normal | 110 / * | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at 1.5 mm Nom. Thickn. | HB / * | class | UL 94 |
| Thickness tested | 1.5 / * | mm | - |

| Electrical Properties | dry / cond | Unit | Test Standard |
|------------------------------|---------------------------------------|-------|---------------|
| ISO Data | · · · · · · · · · · · · · · · · · · · | | |
| Relative permittivity, 100Hz | 4 / 10 | - | IEC 62631-2-1 |
| Relative permittivity, 1MHz | 4 / 4 | - | IEC 62631-2-1 |
| Dissipation Factor, 100Hz | 110 / 2200 | E-4 | IEC 62631-2-1 |
| Dissipation Factor, 1MHz | 200 / 750 | E-4 | IEC 62631-2-1 |
| Volume Resistivity | 1E13 / 1E10 | Ohm*m | IEC 62631-3-1 |
| Surface Resistivity | * / 1E12 | Ohm | IEC 62631-3-2 |
| Electric Strength | 40 / 35 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 500 / - | - | IEC 60112 |

| Other Properties ISO Data | dry / cond | Unit | Test Standard |
|---------------------------|------------|-------|----------------|
| Water Absorption | 6 / * | % | Sim. to ISO 62 |
| Humidity absorption | 2.1 / * | % | Sim. to ISO 62 |
| Density | 1320 / - | kg/m³ | ISO 1183 |

| Test specimen production | Value | Unit | Test Standard |
|-------------------------------------|-------|------|---------------|
| ISO Data | | | |
| Injection Molding, melt temperature | 290 | °C | ISO 294 |
| Injection Molding, mold temperature | 80 | °C | ISO 294 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 2 - 6 | h | - |
| Processing humidity | ≤0.12 | % | - |
| Melt temperature | 280 - 300 | °C | - |
| Mold temperature | 80 - 120 | °C | - |

Characteristics

Envalior

Processing

Injection Molding

Special Characteristics
Heat aging stabilized

Delivery form

Pellets, Black

Injection Molding

PREPROCESSING

Residual moisture content: 0.03 - 0.12% Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

PROCESSING

Melt temperature (Tmin - Tmax): 280 - 300 °C

Mold temperature: 80 - 120 °C

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.

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