Vitane R 3918

TPU-GF20

geba Kunststoffcompounds GmbH

Rheological properties	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.5	%	ISO 294-4, 2577
Molding shrinkage, normal	0.1	%	ISO 294-4, 2577

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Strain at Break	20	%	ISO 527
Impact Strength (Charpy), +23°C	no break	kJ/m²	ISO 179/1eU
Impact Strength (Charpy), -30°C	75	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	58	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	8.5	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	1600	MPa	ISO 178
Flexural Modulus	4000	MPa	ISO 178
Flexural Modulus Temperature	-30	°C	-
Flexural strength	56	MPa	ISO 178
Abrasion resistance	65	mm³	ISO 4649
Shore Hardness D (15s)	69	-	ISO 868

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	127	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	155	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	125	°C	ISO 306
Coeff. of Linear Therm. Expansion, parallel	7	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion, normal	131	E-6/K	ISO 11359-1/-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1290	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	220	°C	ISO 294
Injection Molding, mold temperature	60	°C	ISO 294

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	210 - 240	°C	-
Mold temperature	40 - 80	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	210 - 220	°C	-
Zone 2	210 - 220	°C	-
Zone 3	220 - 230	°C	-
Nozzle temperature	230 - 240	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Oil Resistance

Features

Acoustical Barrier Properties, Good Adhesion, Thermal Stability

Applications

Automotive, Sports Equipment

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**

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