FT PEEK

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I. Physical Properties[1)]	Test method	Unit	Value
1. Specific gravity (ρ)	ISO 1183	g/cm³	1,32
2. Water absorption[9)]	ISO 62	%	0,4
3. Humidity absorption[9)]			0,07
4a. Maximum permissible service temp[9)]	UL746B	°C	260
4b. Lower permissible service temp[9)]			-40

II. Mechanical Properties	Test method	Unit	Value
1. Tensile strength at yield (σ_S)	ISO 527	MPa	115
2. Elongation at yield. (ε_S)		%	7
3. Tensile strength at break (σ_R)		MPa	67
4. Elongation at break (ε_R)		%	16
5. Impact strength (a_n)	ISO 179	kJ/m²	n.b.
6. Notch impact strength (a_k)[9)]			4
7. Ball indentation (H_k)/Rockwell hardness[9)]	ISO 2039	MPa	250/M 99
8. Shore-D	ISO 868		90
9. Flexural strength ($\sigma_{B\ 3,5\ \%}$)[9)]	ISO 178	MPa	170
10. Modulus of elasticity (E_t)	ISO 527		4210

III. Thermal Properties[9)]	Test method	Unit	Value
1. Vicat-softening point. VST/B/50	ISO 306	°C	250
VST/A/50			-
2. Heat deflection temperature. HDT/B	ISO 75		240
HDT/A			158
3. Coef. of linear thermal expansion (α)	ISO 11359	$K^{-1}*10^{-4}$	0,47
4. Thermal conductivity at 20 °C (λ)	ISO 22007-4	W/(m∗K)	0,25
5. Glass transition temperature. (T_g)	ISO 3146	°C	143
6. Melting temperature (T_m)			340

IV. Electrical Properties	Test method	Unit	Value
1. Volume resistivity (ρ_D)[8)]	IEC 60093	Ω∗cm	≥ 10^{13}
2. Surface resistivity (R_o)[8)]		Ω	≥ 10^{13}
3. Dielectric constant at 1MHz (ε_r)[9)]	IEC 60250	-	3,2
4. Dielectric loss factor at 1 MHz (tanδ)[9)]		-	0,003
5. Dielectric strength[9)]	IEC 60243-1	kV/mm	16
6. Tracking resistance[9)]	IEC 60112	V	CTI 125

V. Additional Data	Test method	Unit	Value
1. Bondability	-	-	+
2. Physiological.indifference [5)] according	EEC	-	+
	FDA	-	+
3. Flammability[9)]	UL 94	-	V-0
4. Limiting Oxygen Index (LOI)[9)]	ASTM D2863	%	35
4. UV stabilisation[6)9)]	-	-	o

1) The physical data contained in this table are typical values and reflect the current state of our knowledge. The data are arithmetic average values which are tested by test specimens made out of rods (ø 40-60 mm). These has to be understood as guidelines, and shall not be used for specification purposes for finished parts. Missing data are completed by data of the raw materials.
5) Physiological indifferences are valid for nature coloured materials on the raw material side. There are also approvals for our semi-finished products available or in preparation. Please check this separately with us. 6) valid for nature coloured materials. An additional UV protection can be taken over by special pigments e.g. carbon black. 7) Test results without UL registration 8) Data are only valid for natural colours
9) Data taken from raw material *Self-assessment without test certificate * Own classification without official test report
+ = yes o = limited - = no/no data available n.b. = no break

N'hésitez pas à nous contacter pour vérifier que vous disposez de la version actualisée de notre fiche technique.

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1. **Information of the used substances and restrictions according (EU) 10/2011 (Annex I and II)**

Substance	CAS-No.	Restrictions
4,4′-difluorobenzophenone	345-92-6	SML = 0,05 mg/kg
1,4-dihydroxybenzene	123-31-9	SML = 0,6 mg/kg

2. **The following substances which are both approved as additives for plastics and as food additives are used in the product ("DUAL USE additives" according Article 11 (3) of (EU) No 10/2011):**

Substance
Calcium Stearat (CAS-No 1592-23-0)

3. **Specification on the use of the products in accordance with ÖN EN 1186 / (EU) 10/2011**

food simulant for migration test	time and temperature of treatment and storage in contact with the food	ratio of food contact area to volume (S/V)
Overall migration		
10 % ethanol	4h reflux (OM6)	6
3 % acetic acid	4h reflux (OM6)	
Vegetable oil	2h / 175°C (OM7)	
Additional simulant E (Tenax)	2h / 225°C	
Specific migration		
95 % ethanol	4h reflux	

The kind of foodstuff intended to come in contact with our plastic materials reveals out of the chosen food simulants and can be found in (EU) 10/2011 Annex III, Table 2.

4. **Bisphenol A (BPA)**
During the production of 1500 X (PEEK) we do not intentionally add or use Bisphenol A (BPA).

Migration tests according (EU) 10/2011 were executed by an independent laboratory on machined samples out of our stock shapes. The suitability of the articles for the final application, including their effect on smell and taste of the food, and observance of any given limitations (for example overall migration, specific limits and other analytical requirements) must be ensured in each case by the person who introduces the finished food contact article into circulation. It is the responsibility of our customer to ensure the traceability of our product.