TECASINT 8061 yellow-brown - Stock Shapes (rods, plates, tubes)

Chemical Designation
PTFE (Polytetrafluorethylene)

Colour
brown-beige

Density
1.68 g/cm^3

Fillers
40% polyimide

Main features
- very good slide and wear properties
- very good electrical insulation
- high toughness
- very good UV and weather resistance
- good chemical resistance
- sensitive to hydrolysis in higher thermal range

Target Industries
- cryogenic engineering
- electrical engineering
- food engineering
- fixture construction
- conveyor technology
- mechanical engineering

Mechanical properties	parameter	value	unit	norm		comment
Tensile strength	50 mm/min	13	MPa	DIN EN ISO 527-1		
Impact strength (Charpy)	max 7.5 J	5.4	kJ/m^2	DIN EN ISO 179-1eU		
Notched impact strength (Charpy)	max 7.5 J	2.5	kJ/m^2	DIN EN ISO 179-1eA		
Shore hardness	Shore D	70		DIN EN ISO 868		
Thermal properties	**parameter**	**value**	**unit**	**norm**		**comment**
Glass transition temperature		- 20	°C	DIN EN ISO 11357		(1) Found in public sources. Individual testing regarding application conditions is mandatory. (2) Thermal expansion XY/Z axis
Service temperature	long-term	270	°C	-	1)	
Thermal expansion (CLTE)	50-200°C	6.7 / -	10^{-5} K^{-1}	DIN 53 752	2)	
Specific heat		1	J/(g*K)	-		
Thermal conductivity	40°C	0.25	W/(K*m)	ISO 8302		
Electrical properties	**parameter**	**value**	**unit**	**norm**		**comment**
volume resistivity	23°C	10^{17}	Ω*cm	DIN IEC 60093		
Other properties	**parameter**	**value**	**unit**	**norm**		**comment**
Water absorption	24 h in water, 23°C	1.12	%	DIN EN ISO 62		(1) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory.
Flammability (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)	

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