

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

### Chemical Designation

PTFE (Polytetrafluorethylene)

### Colour

brown-beige

### Density

1.68 g/cm<sup>3</sup>

### 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
- medical technology

<b>Mechanical properties</b>					
	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Tensile strength	50 mm/min	13	MPa	DIN EN ISO 527-1	
Impact strength (Charpy)	max 7.5 J	5.4	kJ/m <sup>2</sup>	DIN EN ISO 179-1eU	
Notched impact strength (Charpy)	max 7.5 J	2.5	kJ/m <sup>2</sup>	DIN EN ISO 179-1eA	
Shore hardness	Shore D	70		DIN EN ISO 868	
<b>Thermal properties</b>					
	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
Glass transition temperature		- 20	°C	DIN EN ISO 11357	(1) Found in public sources.
Service temperature	long-term	270	°C	-	1) Individual testing regarding application conditions is mandatory.
Thermal expansion (CLTE)	50-200°C	6.7 / -	10 <sup>-5</sup> K <sup>-1</sup>	DIN 53 752	2) Thermal expansion XY/Z axis
Specific heat		1	J/(g*K)	-	
Thermal conductivity	40°C	0.25	W/(K*m)	ISO 8302	
<b>Electrical properties</b>					
	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
volume resistivity	23°C	10 <sup>17</sup>	Ω*cm	DIN IEC 60093	
<b>Other properties</b>					
	<i>parameter</i>	<i>value</i>	<i>unit</i>	<i>norm</i>	<i>comment</i>
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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