

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

# Chemical Designation

PTFE (Polytetrafluorethylene)

## Colour

brown-beige

# Density

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

#### Fillor

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

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 <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		comment	
Shore hardness	Shore D	70		DIN EN ISO 868			
Thermal properties	parameter	value	unit	norm			
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.  (2) Thermal expansion XY/Z axis	
Thermal expansion (CLTE)	50-200°C	6.7 / -	10 <sup>-5</sup> K <sup>-1</sup>	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 <sup>17</sup>	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	
Flammability (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)		

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Ensinger Ltd Wilfried Way Tonyrefail, Mid Glamorgan CF39 8JQ Great Britain

Phone (01443) 678400 Fax (01443) 675777 www.ensinger.co.uk Date: 2023/09/26 Version: A