

TECASINT 8001 yellow-brown - Stock Shapes (rods, plates, tubes)

Chemical Designation

PTFE (Polytetrafluorethylene)

Colour

ochre-brown

Density

1.88 g/cm³

Fillers

20% 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
- medical technology
- textile industry

Mechanical properties	parameter	value	unit	norm	comment
Tensile strength	50 mm/min	15	MPa	DIN EN ISO 527-1	
Shore hardness	Shore D	65		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.
Service temperature	long-term	250	°C	-	1)
Thermal expansion (CLTE)	50-200°C	14.4 / -	10 ⁻⁵ K ⁻¹	DIN 53 752	2)
Specific heat		1	J/(g*K)	-	(2) Thermal expansion XY/Z axis
Thermal conductivity	40°C	0.25	W/(K*m)	ISO 8302	
Electrical properties	parameter	value	unit	norm	comment
volume resistivity	23°C	10 ¹⁸	Ω*cm	DIN IEC 60093	
Dielectric constant	10 kHz	2.3		DIN IEC 60250	
Other properties	parameter	value	unit	norm	comment
Water absorption	24 h in water, 23°C	0.70	%	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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