

Product Information

TROGAMID® CX9704 natural color

Transparent, amorphous polyamide for injection molding

TROGAMID CX9704 is an amorphous and transparent polyamide with a glass transition temperature of 132°C suitable for injection molding.

The product has been approved for direct contact with foodstuffs by the European Community (Directive 2002/72/EC).

TROGAMID CX9704 is supplied as cylindrical pellets in moisture-proof packaging.

For information about processing of TROGAMID CX9704, please follow the general recommendations in our brochure "TROGAMID Handling and Processing". Deviations of molds or in processing are possible to a certain extent, if they are required by the cavity or the process itself.

For further information, please contact our experts in the department Market Development of the High Performance Polymers Business Line.

Property	Test method		Unit	TROGAMID CX9704	
	international	national			
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm ³	1.02
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at yield		ISO 527-2	DIN EN ISO 527-2	MPa	60
Strain at yield				%	8
Strain at break				%	> 50
Tensile modulus		ISO 527-1	DIN EN ISO 527-1	MPa	1400
		ISO 527-2	DIN EN ISO 527-2		
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m ²	N ¹⁾
	0°C			kJ/m ²	N ¹⁾
	-30°C			kJ/m ²	N ¹⁾
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m ²	11 C ¹⁾
	0°C			kJ/m ²	11 C ¹⁾
	-30°C			kJ/m ²	10 C ¹⁾
Shore-hardness D		ISO 868	DIN EN ISO 868		81
Temperature of deflection under load		ISO 75-1	DIN EN ISO 75-1		
		ISO 75-2	DIN EN ISO 75-2		
Method A	1.8 MPa			°C	102
Method B	0.45 MPa			°C	120
Vicat softening temperature		ISO 306	DIN EN ISO 306		
Method A	10 N			°C	132
Method B	50 N			°C	125
Linear thermal expansion longitudinal	23-55°C	ISO 11359	DIN 53752		
				10 ⁻⁴ K ⁻¹	0.9
Relative permittivity		IEC 60250	DIN VDE 0303-T4		
	100 Hz				3.4
Dissipation factor		IEC 60250	DIN VDE 0303-T4		
	100 Hz			10 ⁻⁴	130
Comparative tracking index		IEC 60112	IEC 60112		
Test solution A	CTI				600
	100 drops value				575
Volume resistivity		IEC 60093	IEC 60093	Ohm · cm	10 ¹³
Surface resistance R _{0A}		IEC 60093	IEC 60093	Ohm	10 ¹⁴
Melting range		ISO 11357			
DSC	2 nd heating			°C	132
Flammability acc. UL94		IEC 60695	UL94		
	0.8 mm				HB
	1.6 mm				HB
Water absorption	saturation	ISO 62	DIN EN ISO 62	%	3.5
Mold shrinkage		determined on 2 mm sheets			
	in flow direction	with film gate at rim,		%	0.4
	in transverse direction	mold temperature 80°C, ISO294-4		%	0.5

Pigmentation may affect values.

¹⁾ C = Complete break, incl. hinge break H
N = No break

® = registered trademark

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