

Product Information

TROGAMID® CX7323

Microcrystalline, permanently transparent polyamide

TROGAMID CX7323 is a microcrystalline transparent polyamide for the manufacture of parts according to the injection molding procedure.

The crystallites are so small, that they do not scatter visible light, and the material appears transparent to the human eye. The crystalline structure causes the excellent crack resistance for this polymer.

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

Furthermore the product meets the USP Class VI (United States Pharmacopeia) approval.

TROGAMID CX7323 is supplied as spherical pellets in polyethylene- packaging.

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 CX7323	
	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⁾
	-30°C			kJ/m ²	N ¹⁾
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m ²	14 C ¹⁾
	-30°C			kJ/m ²	11 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	108
Method B	0.45 MPa			°C	122
Vicat softening temperature		ISO 306	DIN EN ISO 306		
Method A	10 N			°C	137
Method B	50 N			°C	130
Linear thermal expansion longitudinal / transverse	23-55°C	ISO 11359	DIN 53752	10 ⁻⁴ K ⁻¹	0.9 / 0.9
Relative permittivity		IEC 60250	DIN VDE 0303-T4		
	100 Hz				3.6
Dissipation factor		IEC 60250	DIN VDE 0303-T4		
	100 Hz			10 ⁻⁴	115
Surface resistance R _{0A}		IEC 60093	IEC 60093	Ohm	10 ¹³
Melting range		ISO 11357			
DSC	2 nd heating			°C	250
Melt volume-flow rate (MVR)		ISO 1133	DIN EN ISO 1133		
	280°C/2.16kg			cm ³ /10 min	approx. 15
Comparative tracking index		IEC 60112	IEC 60112		
Test solution A	CTI				600
	100 drops value				575
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,		%	0.65
	in transverse direction	mold temperature 80°C, ISO294-4		%	0.80

Pigmentation may affect values.

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

® = registered trademark

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