

Product Texts

Medium-viscosity and transparent polyamide for injection molding with release agent

TROGAMID® CX9710 is a medium-viscosity and transparent polyamide for injection molding for the manufacture of parts in the optical industry.

The material absorbs only small amounts of water. Components made from this material therefore show excellent dimensional stability under changing ambient humidity as well as consistent UV-stability and chemical resistance.

TROGAMID® CX9710 is supplied as spherical pellets in moisture-proof packaging.

Pigmentation may affect values.

For information about processing of TROGAMID®, please follow the general recommendations about "[Processing of TROGAMID® compounds](#)".

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.TROGAMID.COM

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	20 / *	cm ³ /10min	ISO 1133
Temperature	285 / *	°C	-
Load	5 / *	kg	-
^[C] Molding shrinkage, parallel	0.7 / *	%	ISO 294-4, 2577
^[C] Molding shrinkage, normal	0.8 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	1400 / -	MPa	ISO 527
^[C] Yield stress	60 / -	MPa	ISO 527
^[C] Yield strain	8 / -	%	ISO 527
^[C] Nominal strain at break	>50 / -	%	ISO 527
^[C] Tensile creep modulus, 1h	* / 1400	MPa	ISO 899-1
^[C] Tensile creep modulus, 1000h	* / 700	MPa	ISO 899-1
^[C] Charpy impact strength, +23°C	N / -	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	N / -	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	11 / 10.5	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / C	-	-
^[C] Charpy notched impact strength, -30°C	13 / -	kJ/m ²	ISO 179/1eA
^[C] Type of failure	C / -	-	-
^[C] Shore D hardness	81 / *	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	250 / *	°C	ISO 11357-1/-3
^[C] Glass transition temperature, 10°C/min	140 / *	°C	ISO 11357-1/-2
^[C] Temp. of deflection under load, 1.80 MPa	108 / *	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	122 / *	°C	ISO 75-1/-2
^[C] Vicat softening temperature, B	130 / *	°C	ISO 306
^[C] Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
^[C] Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-2
^[C] Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	-

[C] Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	3.6 / -	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	3.2 / -	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	120 / -	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	325 / -	E-4	IEC 62631-2-1
[C] Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
[C] Comparative tracking index	600 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	3.5 / *	%	Sim. to ISO 62
[C] Humidity absorption	1.5 / *	%	Sim. to ISO 62
[C] Density	1020 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
ISO Data			
[C] Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294
Injection Molding, pressure at hold	70	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets, Natural Color

Additives

Release agent

Special Characteristics

Light stabilized or stable to light, U.V. stabilized or stable to weather, Transparent

Chemical Resistance

General Chemical Resistance

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa