

Product Information

TROGAMID® eCO Impact 75

HIGH IMPACT-RESISTANT, TRANSPARENT POLYAMIDE COMPOUND



TROGAMID® eCO Impact 75 is an impact-modified transparent polyamide for the manufacture of injection molded parts.

TROGAMID® eCO Impact 75 is supplied as cylindrical pellets in polyethylene packaging.

For injection molding, processing temperatures between 280°C and 300°C are recommended. The mold temperature should be within a range of 60°C to 80°C.

It is recommended to dry the material in a dry-air dryer at a temperature of 80°C to 90°C for 8 to 12 hours before use.

The results presented were generated from a small number of production lots. They are therefore provisional and not yet the result of a statistical analysis.

Pigmentation may affect property values.

Key Features

Industrial Sector

Sustainable, Optics, Sports and Lifestyle

Optics

Transparent

Sustainability

Contains renewable resources

Conformity

Contains renewable resources

Processing

Injection molding

Additives

Unfilled

Delivery form

Pellets, Granules

Mechanical properties ISO

Tensile modulus

dry

160000

Unit

psi

Test Standard

ISO 527

Yield stress	6530	psi	ISO 527
Yield strain	7.5	%	ISO 527
Strain at break, B	>50	%	ISO 527
Charpy impact strength, +23°C	N	ftlb/in ²	ISO 179/1eU
Charpy impact strength, -30°C	N	ftlb/in ²	ISO 179/1eU
Charpy notched impact strength, +23°C	38.5	ftlb/in ²	ISO 179/1eA
Type of failure	P	-	-
Charpy notched impact strength, -30°C	14.7	ftlb/in ²	ISO 179/1eA
Type of failure	C	-	-
Flexural modulus, 23°C	168000	psi	ISO 178
Flexural stress at conv. deflection, 23°C	5950	psi	ISO 178
Flexural strain at flexural strength, 23°C	3.5	%	ISO 178

Mechanical properties ASTM	dry	Unit	Test Standard
Izod impact strength, 23°C, U	N	ftlb/in	ASTM D 4812
Izod impact strength, -30°C, U	N	ftlb/in	ASTM D 4812
Izod notched impact strength, 23°C, A	16	ftlb/in	ASTM D 256 A
Type of failure	P	-	-
Izod notched impact strength, -30°C, A	14	ftlb/in	ASTM D 256 A
Type of failure	P(C)	-	-

Thermal properties	dry	Unit	Test Standard
Melting temperature	473	°F	ISO 11357-1/-3

Physical properties	dry	Unit	Test Standard
Density	1	g/cm ³	ISO 1183

Burning Behav.	dry	Unit	Test Standard
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10

TROGAMID® CX

UL 94 Flame rating	HB	-	UL 94
Thickness tested	0.0315	in	-

Optical properties	dry	Unit	Test Standard
Color L	95	-	CIE
Color a	-0.5	-	CIE
Color b	2	-	CIE
Haze	9	%	ASTM D 1003
Haze Thickness tested	0.0787	in	-
Light Transmittance	88	%	ASTM D 1003
Light Transmittance Thickness tested	0.0787	in	ASTM D 1003

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	12	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	0.6	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577
Mold temperature	176	°F	-

Characteristics

Special Characteristics

High impact strength

Color

Natural color

Delivery form

Cylindrical pellets