

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**

**1100**

**Unit**

MPa

**Test Standard**

ISO 527

Yield stress	<b>45</b>	MPa	ISO 527
Yield strain	<b>7.5</b>	%	ISO 527
Strain at break, B	<b>&gt;50</b>	%	ISO 527
Charpy impact strength, +23°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	<b>N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>81</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	<b>P</b>	-	-
Charpy notched impact strength, -30°C	<b>31</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Type of failure	<b>C</b>	-	-
Flexural modulus, 23°C	<b>1160</b>	MPa	ISO 178
Flexural stress at conv. deflection, 23°C	<b>41</b>	MPa	ISO 178
Flexural strain at flexural strength, 23°C	<b>3.5</b>	%	ISO 178

<b>Mechanical properties ASTM</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Izod impact strength, 23°C, U	<b>N</b>	J/m	ASTM D 4812
Izod impact strength, -30°C, U	<b>N</b>	J/m	ASTM D 4812
Izod notched impact strength, 23°C, A	<b>854</b>	J/m	ASTM D 256 A
Type of failure	<b>P</b>	-	-
Izod notched impact strength, -30°C, A	<b>747</b>	J/m	ASTM D 256 A
Type of failure	<b>P(C)</b>	-	-

<b>Thermal properties</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Melting temperature	<b>245</b>	°C	ISO 11357-1/-3

<b>Physical properties</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Density	<b>1000</b>	kg/m <sup>3</sup>	ISO 1183

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

## TROGAMID® CX

UL 94 Flame rating	<b>HB</b>	-	UL 94
Thickness tested	<b>0.8</b>	mm	-

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

<b>Rheological properties</b>	<b>dry</b>	<b>Unit</b>	<b>Test Standard</b>
Melt volume-flow rate, MVR	<b>12</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>280</b>	°C	-
Load	<b>2.16</b>	kg	-
Molding shrinkage, parallel	<b>0.6</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>0.7</b>	%	ISO 294-4, 2577
Mold temperature	<b>80</b>	°C	-

### Characteristics

#### Special Characteristics

High impact strength

#### Color

Natural color

#### Delivery form

Cylindrical pellets