

**Product Texts**

Product-nomenclature: ISO 16396-PA6I/6T,,FT,C11-030

Co Polyamide

Partially aromatic Polyamide

**Product Attributes**

Highly transparent, Barrier material, Improved UV resistance (outdoor use)

**Markets**

**Packaging**

Blow moulded containers, Injectionstretchblowmoulded containers, Non oriented film, Oriented film,  
Paper coating, Tubes, Cosmetics / Personal care

**Approvals**

**Food Contact**

EU Requirements, FDA

**Medical**

USP VI

**Potable Water Contact**

NSF 61

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	25 / *	cm <sup>3</sup> /10min	ISO 1133
Temperature	275 / *	°C	-
Load	5 / *	kg	-
<sup>[C]</sup> Density of melt	1100	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	0.21	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	2000	J/(kg K)	-
<sup>[C]</sup> Eff. thermal diffusivity	9.55E-8	m <sup>2</sup> /s	-
<sup>[C]</sup> Ejection temperature	120	°C	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	3000 / 3000	MPa	ISO 527
<sup>[C]</sup> Yield stress	100 / 100	MPa	ISO 527
<sup>[C]</sup> Yield strain	5 / 5	%	ISO 527
<sup>[C]</sup> Nominal strain at break	>50 / >50	%	ISO 527
<sup>[C]</sup> Charpy notched impact strength, +23°C	8 / 8	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	8 / 2	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	125 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Glass transition temperature, 10°C/min	125 / *	°C	ISO 11357-1/-2

[C]: CAMPUS

Optical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Gloss, 60°	160 / *	-	ISO 2813

[C]: CAMPUS

## Grivory G 21 natural

PA6I/6T

EMS-GRIVORY | a unit of EMS-CHEMIE AG

Other properties	dry / cond	Unit	Test Standard
<sup>[C]</sup> Water absorption	7 / *	%	Sim. to ISO 62
<sup>[C]</sup> Humidity absorption	2 / *	%	Sim. to ISO 62
<sup>[C]</sup> Density	1180 / -	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Film Properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Stress at yield, parallel	85 / *	MPa	ISO 527-3
<sup>[C]</sup> Stress at yield, normal	85 / *	MPa	ISO 527-3
<sup>[C]</sup> Strain at yield, parallel	5 / *	%	ISO 527-3
<sup>[C]</sup> Strain at yield, normal	5 / *	%	ISO 527-3
<sup>[C]</sup> Maximum strain, parallel	300 / *	%	ISO 527-3
<sup>[C]</sup> Maximum strain, normal	300 / *	%	ISO 527-3
<sup>[C]</sup> Elmendorf Tear resistance, parallel	10 / *	N	ISO 6383-2
<sup>[C]</sup> Elmendorf Tear resistance, normal	10 / *	N	ISO 6383-2
<sup>[C]</sup> Trouser Tear resistance, parallel	5 / *	N/mm	ISO 6383-1
<sup>[C]</sup> Trouser Tear resistance, normal	5 / *	N/mm	ISO 6383-1
<sup>[C]</sup> WVTR, 23°C/85%r.h.	7 / *	g/(m <sup>2</sup> *d)	ISO 15106-1/-2
<sup>[C]</sup> Oxygen transmission rate, 23°C/0%r.h.	30 / *	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	ISO 15105-1/-2
<sup>[C]</sup> Oxygen transmission rate, 23°C/85%r.h.	10 / *	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	ISO 15105-1/-2
<sup>[C]</sup> Carbon Dioxide transm. rate, 23°C/0%r.h.	90 / *	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	ISO 15105-1/-2
<sup>[C]</sup> Carbon Dioxide transm. rate, 23°C/85%r.h.	40 / *	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	ISO 15105-1/-2

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294
Injection Molding, injection velocity	250	mm/s	ISO 294
Injection Molding, pressure at hold	75	MPa	ISO 294

[C]: CAMPUS

### Characteristics

#### Processing

Injection Molding, Film Extrusion, Other Extrusion, Coating, Blow Molding

#### Delivery form

Granules, Natural Color

#### Special Characteristics

U.V. stabilized or stable to weather, Transparent

#### Features

Barrier Properties, Copolymer

#### Certifications

Food contact, Food approval FDA 21 CFR, Drinking water contact, Drinking water contact NSF 61, Medical Grade, US Pharmacopeia Class VI Approved

#### Applications

Packaging

#### Regional Availability

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

### Other text information

#### Film extrusion

PREPROCESSING

Max. water content : &lt;= 0.1 %

PROCESSING

Melt temperature : 250-270 °C

Smooth or roughened feeding zone : 60-90 °C

Barrel temp. profile : 250-260 °C

Head temp. : 260-250 °C

Please consider the information about the application of the materials.