

**Tarnamid® T-27 MCS I**

PA6

Grupa Azoty S.A.

<b>Processing/Physical Characteristics</b>	<b>dry / cond</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	<b>70 / *</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>275 / *</b>	°C	-
Load	<b>5 / *</b>	kg	-
Molding shrinkage, parallel	<b>2.0 / *</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>1.9 / *</b>	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Modulus	<b>2300 / 1000</b>	MPa	ISO 527
Yield stress	<b>65 / 40</b>	MPa	ISO 527
Strain at break	<b>&gt;50 / &gt;50</b>	%	ISO 527
Flexural modulus, 23°C	<b>1800 / 600</b>	MPa	ISO 178
Charpy impact strength, +23°C	<b>N / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength, -30°C	<b>N / N</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>15 / 25</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	<b>12 / 10</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	<b>15 / 25</b>	kJ/m <sup>2</sup>	ISO 180/1A
Ball indentation hardness	<b>110 / 50</b>	MPa	ISO 2039-1
<b>Thermal properties</b>			
<b>ISO Data</b>			
Melting temperature, 10°C/min	<b>221 / *</b>	°C	ISO 11357-1/-3
Temp. of deflection under load, 1.80 MPa	<b>55 / *</b>	°C	ISO 75-1/-2
Vicat softening temperature, B	<b>155 / *</b>	°C	ISO 306
Coeff. of linear therm. expansion, parallel	<b>130 / *</b>	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	<b>160 / *</b>	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	<b>HB / *</b>	class	IEC 60695-11-10
Thickness tested	<b>3.2 / *</b>	mm	-
<b>Electrical properties</b>			
<b>ISO Data</b>			
Relative permittivity, 1MHz	<b>3.5 / 4.2</b>	-	IEC 62631-2-1
Dissipation factor, 1MHz	<b>180 / 1000</b>	E-4	IEC 62631-2-1
Volume resistivity	<b>1E13 / 1E10</b>	Ohm*m	IEC 62631-3-1
Surface resistivity	<b>* / 1E13</b>	Ohm	IEC 62631-3-2
Electric strength	<b>30 / 24</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>600 / 600</b>	-	IEC 60112
<b>Other properties</b>			
Water absorption	<b>8.5 / *</b>	%	Sim. to ISO 62
Humidity absorption	<b>2.6 / *</b>	%	Sim. to ISO 62
Density	<b>1100 / -</b>	kg/m <sup>3</sup>	ISO 1183

**Characteristics****Processing**

Injection Molding

**Delivery form**

Granules, Black, Natural Color

**Special Characteristics**

High impact or impact modified

**Applications**

Automotive, Building Construction, Electrical and Electronical

**Regional Availability**

Europe