



<b>Tarnoform® 411</b>			
POM		Grupa Azoty S.A.	
<b>Rheological properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt volume-flow rate, MVR	11.5	cm <sup>3</sup> /10min	ISO 1133
Temperature	190	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Melt flow index, MFI	13	g/10min	ISO 1133
MFI temperature	190	°C	ISO 1133
MFI load	2.16	kg	ISO 1133
<b>Mechanical properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Tensile Modulus	3000	MPa	ISO 527-1/-2
Yield stress	65	MPa	ISO 527-1/-2
Yield strain	10	%	ISO 527-1/-2
Strain at break	30	%	ISO 527-1/-2
Charpy impact strength (+23°C)	170	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	6	kJ/m <sup>2</sup>	ISO 179/1eA
Flexural modulus (23°C)	2700	MPa	ISO 178
Izod Impact notched, 23°C	6	kJ/m <sup>2</sup>	ISO 180/1A
Ball indentation hardness	170	MPa	ISO 2039-1
<b>Thermal properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melting temperature (10°C/min)	172	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	120	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	155	°C	ISO 306
Coeff. of linear therm. expansion, parallel	110	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.2	mm	IEC 60695-11-10
<b>Electrical properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Relative permittivity, 1MHz	3.8	-	IEC 60250
Volume resistivity	1E13	Ohm*m	IEC 60093
Surface resistivity	1E14	Ohm	IEC 60093
Electric strength	25	kV/mm	IEC 60243-1
Comparative tracking index	600	-	IEC 60112
<b>Other properties</b>			
	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Water absorption	0.65	%	Sim. to ISO 62
Humidity absorption	0.2	%	Sim. to ISO 62
Density	1410	kg/m <sup>3</sup>	ISO 1183
<b>Characteristics</b>			
<b>Processing</b>		<b>Features</b>	
Injection Molding		Copolymer	
<b>Delivery form</b>		<b>Applications</b>	
Granules, Black, Natural Color		Automotive, Building Construction, Electrical and Electronical	