



## PP-H AlphaPlus 3000x1500x12 mm grey (protective film)

Article No.	P2201006
Category	PP

### Technical Properties

#### Density & Weight

Property	Value	Unit	Test standard
Density	0.91	g/cm <sup>3</sup>	ISO 1183

#### Moisture Absorption

Property	Value	Unit	Test standard
Water absorption to saturation	0.2	%	ISO 62
Water Absorption to Saturation	0.2	%	ISO 62

#### Tensile Properties

Property	Value	Unit	Test standard
Tensile Strength	36	MPa	ISO 527
Modulus of elasticity (tensile)	1700	MPa	ISO 527-2
Breakdown Voltage	30	MPa	ISO 527
Break Elongation	8	%	ISO 527-2

#### Flexural Properties

Property	Value	Unit	Test standard
Flexural Strength	37	MPa	DIN EN ISO 527-2

#### Impact Resistance

Property	Value	Unit	Test standard
Notched impact strength (Charpy)	9	kJ/m <sup>2</sup>	ISO 179/1eA
Impact Resistance (Charpy)	7.7	kJ/m <sup>2</sup>	ISO 179

#### Hardness

Property	Value	Unit	Test standard
Hardness Shore D	72	° Shore D	ISO 868
Ball pressure hardness	110	MPa	ISO 2039

### Temperature Limits

Property	Value	Unit	Test standard
Melting point	161	°C	DIN EN ISO 11357
Maximal operating temperature (short-term)	127	°C	UL746B
Maximum Operating Temperature	80	°C	
Minimum temperature	-7	°C	
Heat deflection temperature (HDT/A)	54	°C	ISO 75
Heat deflection temperature (HDT/B)	90	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306

### Thermal Conductivity

Property	Value	Unit	Test standard
Thermal Conductivity	0.27	W/(m·K)	ISO 22007-4

### Thermal Expansion

Property	Value	Unit	Test standard
Thermal Expansion Coefficient	1.6	10 <sup>-4</sup> /K	ISO 11359-2

### Insulation Properties

Property	Value	Unit	Test standard
Dielectric Strength	40	kV/mm	IEC 60243-1
Volume Resistivity	10 <sup>14</sup>	Ω	DIN EN 62631-3-1
Dielectric Constant (1 MHz)	2.4	-	IEC 60250
Dielectric loss factor (1 MHz)	13.4	-	IEC 60250
Dielectric loss factor (100 Hz)	0.0	-	IEC 60250

### Static spread

Property	Value	Unit	Test standard
Surface Resistivity	10 <sup>13</sup>	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112

## Fire Classification

Property	Value	Unit	Test standard
Flammability Classification (UL 94)	<b>60695</b>		UL 94