

# Item Description

## Item ID

# PRE-ELEC<sup>®</sup> ABS 1415

## 1415

ABS extrusion compound  
Electrically conductive

Typical end product  
Applications

Sheets  
Profiles

PRE-ELEC<sup>®</sup> ABS 1415 is a conductive thermoplastic compound based on ABS. The conductivity is achieved by using a special carbon black. The material is designed for extrusion.

Special properties	Unit	Value	Method
Volume resistivity(*)	Ω.cm	300	PRE021
Surface resistance(*)	Ω	1E+03	IEC 61340-2-3

General properties	Unit	Value	Method
Specific gravity	g/cm <sup>3</sup>	1,1	ISO 1183
Melt flow rate at 220°C 10,0 kg	g/10 min	2,5	ISO 1133
Mould shrinkage	%	0,5 - 0,8	ISO 294-4
Vicat, Rate A	°C	104	ISO 306/A50
Vicat, Rate B	°C	91	ISO 306/B50
HDT, 0.45 MPa	°C	88	ISO 75/Bf
HDT, 1.80 MPa	°C	73	ISO 75/Af

Mechanical properties	Unit	Value	Method
Tensile strength	MPa	32	ISO 527
Yield strength	MPa	40	ISO 527
Tensile strain at break	%	10	ISO 527
Tensile strain at yield	%	4	ISO 527
Flexural modulus	MPa	1900	ISO 178
Impact strength, Charpy	kJ/m <sup>2</sup>		ISO 179
Unnotched, +23°C		NB	
Notched, +23°C		NB	
Unnotched, -20°C		17	
Notched, -20°C		15	
Hardness, Shore D	-	77	ISO 868

MFR is measured from granulates

Test specimen: injection moulded rod; Thickness: 10 mm, width: 4 mm

\*) extruded tape; Thickness 600-800 µm

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**Processing instructions**

	Unit	Processing range
<b>Extrusion</b>		
Cylinder temperature profile	°C	200 - 240
Die temperature profile	°C	220 - 240
Tool/Roll temperature	°C	60 - 90

**Notes**

Drying of the product is recommended for 2-4 hours at 80-100°C prior to use.

These parameters are for guidance only. The process parameters should always be optimized for the used equipment. The instructions of the equipment manufacturer should be followed. Caution should be taken when handling molten material as it is extremely hot and may cause severe burns.

**Storage**

Product-specific details are mentioned in the notes above. The general minimum shelf life for Premix's product is 3 years with the following conditions: 1) original package is unopened, 2) the storage area and conditions provide protection from direct sunlight and significant changes in storage temperature, 3) the product is pre-dried accordingly before use.

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**PRE-ELEC<sup>®</sup> is a registered trademark of Premix.**

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