



# TECHNICAL DATA SHEET

## Witcom PP-H-EC-FR-ECO Natural EXP2, based on Polypropylene Homopolymer (PP-H)

electrically conductive, flame retardant, free from halogens

Properties	Test methods	Units	PP-H-EC-FR-ECO Natural EXP2
------------	--------------	-------	-----------------------------

### Physical properties

Specific gravity	ISO 1183	g/cm <sup>3</sup>	1,12
Water absorption at saturation, 23 °C	ISO 62	%	0,03
Humidity absorption, 23 °C/50 % r.h.	ISO 62	%	0,01
Mould shrinkage (flow direction, 3 mm)	ISO 2577	%	1,3 - 1,8

### Mechanical properties

Tensile strength (max.)	ISO 527	MPa	30
Elongation at break	ISO 527	%	>20
Flexural strength	ISO 178	MPa	40
Flexural modulus	ISO 178	GPa	2,2
IZOD impact strength, notched	ISO 180/1eA	kJ/m <sup>2</sup>	4,0
IZOD impact strength, unnotched	ISO 180/1eU	kJ/m <sup>2</sup>	20

### Thermal properties

Heat distortion temperature (1,81 MPa)	ISO 75	°C	60
Relative temperature index, 3 mm, with impact	UL 746B	°C	75
Coefficient of linear thermal expansion	ISO 11359	K-1·10 <sup>-5</sup>	-

### Flammability

Burning behaviour	ISO 1210	-	V0 @ 3,2 mm
UL recognition	UL94	-	-

### Electrical properties

Surface resistivity	ASTM D257	Ω/sq	10 <sup>4</sup> - 10 <sup>7</sup>
Comparative tracking index	IEC 60112	V	-
Glow wire rating, 1,6 mm	IEC 695-2-1	°C	960

### Processing conditions (injection moulding)

Drying conditions (dehumidifying drier)	: 2 - 4 Hours @ 80 °C
Maximum allowable moisture content	: 0,05 %
Melt temperature	: 200 - 260 °C
Mould temperature	: 40 - 80 °C
Screw speed	: 0,1 - 0,25 m/s
Back pressure	: 0 - 1,0 MPa
Injection pressure	: Keep to a minimum
Injection speed	: Fast ram speed
Hold pressure	: Keep to a minimum

Revision date: 16-05-2012

This information is based on our experience to date and we believe it to be reliable. It is intended as a guide for use at your discretion and risk. We cannot guarantee favourable results and assume no liability in connection with the use of the product described. None of this information is to be taken as a license to operate under, or a recommendation to infringe, any patents.