

# GMTX<sup>®</sup> Xi<sup>®</sup> RPP 35-40-45 F

Innovative Recycled Wood-Polymer Compound

## Product Description

GMTX<sup>®</sup> Xi RPP F is a wood-polymer compound based on PP post-industrial waste and wood waste dust in different percentages (35/40/45 wt.%) combined with a natural bonding agent (GNB patented process).

## Compounds Properties

### GMTX<sup>®</sup> Xi RPP 35 F

	Typical Values**	Units	Test Methods
<b>Physical Properties*</b>			
Melt Flow Rate (190°C, 5 kg)	8,8	g/10'	ISO 1133
Density	1,0	g/cc	ISO 1183
Hardness	65	Shore D	ISO 48
<b>Mechanical Properties*</b>			
Ultimate tensile strength (UTS)	20	N/mm <sup>2</sup>	ISO 527
Tensile elongation (@ UTS)	1,7	%	ISO 527
Tensile modulus	2600	N/mm <sup>2</sup>	ISO 527
Charpy impact strength - notched	3,0	KJ/m <sup>2</sup>	ISO 179

### GMTX<sup>®</sup> Xi RPP 40 F

	Typical Values**	Units	Test Methods
<b>Physical Properties*</b>			
Melt Flow Rate (190°C, 5 kg)	6,2	g/10'	ISO 1133
Density	1,0	g/cc	ISO 1183
Hardness	66,5	Shore D	ISO 48
<b>Mechanical Properties*</b>			
Ultimate tensile strength (UTS)	19	N/mm <sup>2</sup>	ISO 527
Tensile elongation (@ UTS)	1,4	%	ISO 527
Tensile modulus	2800	N/mm <sup>2</sup>	ISO 527
Charpy impact strength - notched	2,8	KJ/m <sup>2</sup>	ISO 179

### GMTX<sup>®</sup> Xi RPP 45 F

	Typical Values**	Units	Test Methods
<b>Physical Properties*</b>			
Melt Flow Rate (190°C, 5 kg)	5,4	g/10'	ISO 1133
Density	1,0	g/cc	ISO 1183
Hardness	66	Shore D	ISO 48
<b>Mechanical Properties*</b>			
Ultimate tensile strength (UTS)	19	N/mm <sup>2</sup>	ISO 527
Tensile elongation (@ UTS)	1,1	%	ISO 527
Tensile modulus	3000	N/mm <sup>2</sup>	ISO 527
Charpy impact strength - notched	2,7	KJ/m <sup>2</sup>	ISO 179

\*based on injection moulded samples.

\*\*listed values are average values.

## Processing: Injection moulding

Pre-drying is suggested to 100 °C for a sufficient time, typically 3 hours. The suggested injection moulding cylinder temperature is between 160 °C and 190 °C. Temperatures should not exceed 190 °C, as it may cause unwanted colouring and degradation of the material. Mould temperatures can be between 40 °C and 60 °C, depending on the application.

## Storage

The products should be stored in a dry and clean environment to prevent contamination and not be exposed to direct sunlight, temperatures above 40°C and high atmospheric humidity as this may lead to quality deterioration.

## Disclaimer

The products mentioned here, are not intended to be used for food contact, medical, pharmaceutical or healthcare applications and we do not support their use for such applications. The information submitted is based on our current experience and knowledge. These data do not release processors from the responsibility of carrying out own tests, neither do they imply any legally binding assurance of certain properties or of the suitability for specific purposes.

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