

AgriPlast^{BW}

Grass Fibre-Reinforced Thermoplastics for Injection Moulding and Extrusion

NFPP 5050/40000 HM

- AgriPlast NFPP 5050/40000 HM is made up of 50% cellulose fibres obtained from meadow grass and 50% polypropylene.
- AgriPlast^{BW} granules can be used with any injection moulding machine and processed into moulded components such as spoons, consoles, machine cases, protective caps, etc. The granules can also be dyed any colour.
- Ideal ease of flow for injection moulding.
High cycle times when manufacturing complex moulded parts.
- AgriPlast^{BW} is lighter than comparable fibre-reinforced composite plastics.
- Fire protection without antimony and halogen.
- Recyclable and residue-free disposal when incinerated.
- Processing Notes for AgriPlast NFPP 5050/40000 HM: sufficiently dry at 70 – 80 °C, heating zones of 200 °C decreasing to 170 °C, possible short-term peak melting temperature of 210 °C, moulding temperature of 40 – 50 °C, avoid frictional and shearing heat, make sure the tool is well ventilated.

Property	Test Method	Unit	Value
Tensile Modulus	DIN EN ISO 527	MPa	≥ 3500
Yield Stress	DIN EN ISO 527	MPa	≥ 30
Yield Strain	DIN EN ISO 527	%	2
Bending Stress	DIN EN ISO 527	N	80
Bending Strain	DIN EN ISO 527	mm	6
Charpy Impact Strength Unnotched	DIN EN ISO 179	kJ/m ²	≥ 12
Charpy Impact Strength Notched	DIN EN ISO 179	kJ/m ²	4,1
Vicat Softening Point	DIN EN ISO 306 Vicat B/50	°C	120
Density	DIN EN ISO 1183	g/cm ³	1,0

“Certificate of Material Excellence” from *MaterialConnexion*; 2008 AVK Prize for Innovation
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