PRODUCT INFORMATION

HAIPLEN H30 G10 BA

Polypropylene homopolymer 50% glass fibres reinforced chemically coupled, medium flow, good mechanical properties.

ISO short	ISO 1043: PP-GF50
Form	Pellets

Key Features

- High mechanical properties
- High stiffness
- Designed for injection moulding applications
- Glass fibres reinforced

Availability

- LP: laser printable
- L: UV stabilized
- HT: high resistance to heat
- H: heat stabilized
- D: detergent stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Consumer
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,34		
Filler content	ISO 3451	%	50	600°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,1		
Mould Shrinkage (Parallel)	Internal method	%	0,2 - 0,35		
Mould Shrinkage (Normal)	Internal method	%	0,4 - 0,5		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	5	230°C - 2,16 kg	
MECHANICAL					
Tensile Modulus	ISO 527-1,2	MPa	11500	Speed 1 mm/min	
Elongation at Break	ISO 527-1,2	%	2,0	Speed 50 mm/min	
Tensile Break Strength	ISO 527-1,2	MPa	95	Speed 50 mm/min	

PRODUCT INFORMATION

HAIPLEN H30 G10 BA

Flexural Modulus	ISO 178	MPa	11000	Speed 2 mm/min
Flexural Break Strength	ISO 178	MPa	180	
IZOD Notched Impact (+23°C)	ISO 180/1A	kJ/m^2	9,0	
IZOD Notched Impact (+23°C)	ASTM D256	J/m	100	
THERMAL				
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	145	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	150	
Heat ageing resistance	Internal method	°C	150	700 h (H version)
Heat ageing resistance	Internal method	°C	150	1000 h (HT version)
Heat ageing resistance	Internal method	°C	150	300 h
FLAMMABILITY				
Flame Behaviour (1,6 mm)	UL94	Class	HB	
Flame Behaviour (3,2 mm)	UL94	Class	HB	
Oxigen index	ASTM D2863	%	21	

INJECTION MOULDING	**Value**
Drying Temperature (Desiccant Dryer)	80 - 100°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,2%
Suggested Max Regrind	< 10%
Melt Temperature	220 - 250°C
Feed Temperature	50°C
Rear Temperature	200°C
Middle Temperature	220°C
Front Temperature	230°C
Nozzle Temperature	240°C
Mould Temperature	40 - 60°C
Injection Rate	50 - 150 mm/sec
Injection Pressure	60 - 120 Mpa
Packing Pressure	30 - 80 Mpa

PRODUCT INFORMATION

HAIPLEN H30 G10 BA

Back Pressure	As low as possible (<0,5 MPa)
Screw Revolving Speed	30 - 80 rpm
Cushion	5 - 8 mm
Vent Depth	0,05 mm

Notes It is normally not necessary to dry HAIPLEN compounds, however should there be surface moisture (condensate) on the moulding compound as a result of incorrect storage, drying process is required. HAIPLEN must be stored indoors at a temperature below 40°C / 105°F avoiding humidity and direct sunlight as well. HAIPLEN can be processed on a standard injection moulding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition and 20% metering. When the heating cylinder is completely purged of HAIPLEN material the machine may be shut down. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine or extruder size, part geometry and design.