PRODUCT INFORMATION

HAIPLEN H30 G6 BA

Polypropylene homopolymer 30% glass fibres reinforced chemically coupled, medium flow, good mechanical properties.

ISO short ISO 1043: PP-GF30
Form Pellets

Key Features

- Designed for injection moulding applications
- Glass fibres reinforced

Availability

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

Process

- INJECTION MOULDING

Application

- Electrical
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Dielectric Strength	IEC 60243-1	kV/mm	25		
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	> 600		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,12		
Filler content	ISO 3451	%	30	600°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,2		
Mould Shrinkage (Parallel)	Internal method	%	0,2 - 0,4		
Mould Shrinkage (Normal)	Internal method	%	0,7 - 0,9		
Melting temperature (DSC)	ISO 11357	°C	165		

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Melt Flow Rate (MFR)	ISO 1133	g/10 min	6	230°C - 2,16 kg
MECHANICAL				
Tensile Modulus	ISO 527-1,2	MPa	5900	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	4	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	92	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	5800	Speed 1 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	130	
IZOD Notched Impact (-30°C)	ASTM D256	J/m	70	
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m^2	9	
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m^2	45	
Ball Indentation Hardness (H 358/30)	ISO 2039-1	MPa	110	
THERMAL				
Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	155	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	135	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	147	
Ball Pressure Test	IEC 60695-10-2	°C	125	
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	
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650	
Burning Rate (US-FMVSS 302)	ISO 3795	mm/min	< 80	Thickness 2 mm
Oxigen index	ASTM D2863	%	20	

INJECTION MOULDING	**Value**
Drying Temperature (Desiccant Dryer)	80 - 100°C
Drying Time (Desiccant Dryer)	2 - 4 hours

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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
Back Pressure	As low as possible (<0,5 MPa)
Screw Revolving Speed	25 - 50 rpm
Screw Revolving Speed	50 rpm @ Diameter 40 mm
Screw Revolving Speed	35 rpm @ Diameter 55 mm
Screw Revolving Speed	25 rpm @ Diameter 75 mm
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 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.