PRODUCT INFORMATION

HAIPLEN H30 G6 BA X0

Polypropylene homopolymer 30% glass fibres reinforced chemically coupled, medium flow, flame retardant UL94 V-0 and UL94-5VA. Designed for all those applications requiring the compliance with the European Directive 2011/65/EC (RoHS 2).

ISO short	ISO 1043: PP-GF30 FR(17)
Form	Pellets
UL file	E143048

Key Features

- Designed for injection moulding applications
- Glass fibres reinforced
- Flame retardant
- Good dimensional stability

Availability

- LP: laser printable
- L: UV stabilized
- H: heat stabilized
- D: detergent stabilized
- all colors

Compliance

- UL94 V-0 approved at 1,5 mm - 3,0 mm thicknesses. UL94-5VA approved at 3,0 mm thickness.

Process

- INJECTION MOULDING

Application

- Electronic
- Electrical
- Building
- Automotive

Property	Method	Unit	Value	Condition	State
ELECTRICAL					
Tracking Resistance (CTI - Method A)	IEC 60112	Volt	600		
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm^3	1,46		
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Water Absorption at Saturation	ISO 62	%	0,15		
Mould Shrinkage (Parallel)	Internal method	%	0,2 - 0,3		
Mould Shrinkage (Normal)	Internal method	%	0,35 - 0,50		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	12	230°C - 2,16 kg	

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MECHANICAL				
Elongation at Break	ISO 527-1,2	%	2,8	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	65	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	6500	Speed 1 mm/min
Flexural Max Strength	ISO 178	MPa	85	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	60	+23°C

THERMAL				
Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	160	
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	

FLAMMABILITY				
Flame Behaviour (1,5 mm)	UL94	Class	V-0	UL approved
Flame Behaviour (3,0 mm)	UL94	Class	V0 - 5VA	UL approved
Glow Wire Flammability Index-GWFI (1 mm)	IEC 60695-2-12	°C	960	
Glow Wire Ignition Temperature-GWIT (1,6 mm)	IEC 60695-2-13	°C	775	
Oxigen index	ASTM D2863	%	29	
Needle flame test (1,6 mm)	IEC 60695-11-5	-	PASSED	

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

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Nozzle Temperature	240°C
Mould Temperature	40 - 80°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	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 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.