



PRODUCT INFORMATION

HAIPLEN H70 G4 MI2 BA

Polypropylene homopolymer 30% mineral/glass fibres reinforced chemically coupled, medium flow, high stiffness and resistance to deformation under load also at high temperatures.

ISO short Form ISO 1043: PP-GF20 MD10 Pellets

Key Features

- High stiffness
- Designed for injection moulding applications
- Glass fibres reinforced
- Good flowability
- Mineral filled
- Good surface aspect

Availability

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

Process

- INJECTION MOULDING

Application

- Power tools
- Household
- Furniture
- Electronic
- Electrical
- Consumer
- 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	1,14		
Filler content	ISO 3451	%	30	550°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,2		



PRODUCT INFORMATION

HAIPLEN H70 G4 MI2 BA

Mould Shrinkage (Parallel)	Internal method	%	0,2 - 0,4	
Mould Shrinkage (Normal)	Internal method	%	0,4 - 0,6	
Melt Flow Rate (MFR)	ISO 1133	g/10 min	14	230°C - 2,16 kg

MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	4900	Speed 1 mm/min
Elongation at Break	ISO 527-1,2	%	2,9	Speed 50 mm/min
Tensile Break Strength	ISO 527-1,2	MPa	70	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	4800	Speed 2 mm/min
Flexural Break Strength	ISO 178	MPa	105	Speed 10 mm/min
Flexural Break Strain	ISO 178	%	3,5	Speed 10 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	70	
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	5,6	
CHARPY Unnotched Impact (+23°C)	ISO 179/1eU	kJ/m ²	32	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	150	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	125	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	145	
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	155	

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB	
Burning Rate (US-FMVSS 302)	ISO 3795	mm/min	< 80	Thickness > 1,5 mm
Oxygen index	ASTM D2863	%	20	

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%



PRODUCT INFORMATION

HAIPLEN H70 G4 MI2 BA

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)
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. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry and design.