



PRODUCT INFORMATION

HAIPLEN H50 C12

Polypropylene homopolymer 60% calcium carbonate filled,
medium flow.

ISO short Form ISO 1043: PP-MD60
Pellets

Key Features

- Designed for injection moulding applications
- Good flowability
- Mineral filled
- Good surface aspect

Availability

- XO: low odour emission
- W: lubricated
- LP: laser printable
- L: UV stabilized
- H: heat stabilized
- D: detergent stabilized
- All colours

Process

- INJECTION MOULDING

Application

- Electronic
- Electrical
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
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ELECTRICAL

Tracking Resistance (CTI - Method A)	IEC 60112	Volt	>600		
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PHYSICAL

Density (+23°C)	ISO 1183	g/cm ³	1,54		
Filler content	ISO 3451	%	60	550 °C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	0,7	+23 °C - 3,2 mm	
Mould Shrinkage (Normal)	Internal method	%	0,7	+23 °C - 3,2 mm	
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230 °C - 2,16 kg	



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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	3400	Speed 1 mm/min
Elongation at Yield	ISO 527-1,2	%	>2	Speed 50 mm/min
Tensile Yield Strength	ISO 527-1,2	MPa	22	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	3000	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	55	+23°C
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	4	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	158	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	90	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	80	
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	130	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	6X10exp(-5)	

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB	
Glow Wire Flammability Index-GWFI (1,6 mm)	IEC 60695-2-12	°C	750	

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,2%
Suggested Max Regrind	< 10%
Melt Temperature	190 - 220°C
Feed Temperature	160°C
Rear Temperature	180°C
Middle Temperature	190°C
Front Temperature	200°C
Nozzle Temperature	210°C
Mould Temperature	30 - 50°C
Injection Rate	50 - 150 mm/sec



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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.