



PRODUCT INFORMATION

HAIPLEN H50 C4

Polypropylene homopolymer 20% calcium carbonate filled,
medium flow.

ISO short Form ISO 1043: PP-MD20
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
PHYSICAL					
Density (+23°C)	ISO 1183	g/cm ³	1,04		
Filler content	ISO 3451	%	20	550°C - 1 h	
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	1,1		
Mould Shrinkage (Normal)	Internal method	%	1,1		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230°C - 2,16 kg	
MECHANICAL					
Tensile Yield Strength	ISO 527-1,2	MPa	30	Speed 50 mm/min	



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Elongation at Break	ISO 527-1,2	%	35	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	2400	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	30	+23°C

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	155
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	90
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	67
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K ⁻¹	6X10exp(-5)

FLAMMABILITY

Flame Behaviour (1,6 mm)	UL94	Class	HB
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INJECTION MOULDING	Value
Drying Temperature (Desiccant Dryer)	80 - 90°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Moisture	0,2%
Suggested Max Re grind	< 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
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



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Notes It is normally not necessary to dry HAIPLLEN compounds, however should there be surface moisture (condensate) on the moulding compound as a result of incorrect storage, drying process is required. HAIPLLEN must be stored indoors at a temperature below 40°C avoiding humidity and direct sunlight as well. HAIPLLEN 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 HAIPLLEN material the machine may be shut down.
