



PRODUCT INFORMATION

## HAIPLEN H50 C8

Polypropylene homopolymer 40% calcium carbonate filled, good surface finish and mechanical properties.

**ISO short Form** ISO 1043: PP-MD40 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
- FA: food approval
- D: detergent stabilized
- All colours

### Process

- INJECTION MOULDING

### Application

- Electronic
- Electrical
- Consumer
- Automotive

Property	Method	Unit	Value	Condition	State
<b>PHYSICAL</b>					
Density (+23°C)	ISO 1183	g/cm <sup>3</sup>	1,25		
Filler content	ISO 3451	%	40	550°C - 1h	
Water Absorption (24h / +23°C)	ISO 62	%	0,05		
Mould Shrinkage (Parallel)	Internal method	%	0,9		
Mould Shrinkage (Normal)	Internal method	%	0,9		
Melt Flow Rate (MFR)	ISO 1133	g/10 min	10	230°C - 2,16 kg	
<b>MECHANICAL</b>					



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Tensile Modulus	ISO 527-1,2	MPa	2800	Speed 1 mm/min
Tensile Yield Strength	ISO 527-1,2	MPa	25	Speed 50 mm/min
Elongation at Break	ISO 527-1,2	%	15	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	2500	Speed 1 mm/min
Flexural Max Strength	ISO 178	MPa	35	Speed 50 mm/min
IZOD Notched Impact (+23°C)	ASTM D256	J/m	25	

**THERMAL**

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	155	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	100	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	72	
Coefficient of linear thermal expansion (parallel)	ISO 11359-1,-2	K <sup>-1</sup>	6x10exp(-5)	

**FLAMMABILITY**

Flame Behaviour (1,6 mm)	UL94	Class	HB	
Glow Wire Flammability Index-GWFI (2 mm)	IEC 60695-2-12	°C	650	

**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



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