



PRODUCT INFORMATION

HAIPLEN H10 T4

Polypropylene homopolymer 20% talcum filled, low flow, high stiffness.

ISO short Form ISO 1043: PP-MD20 Pellets

Key Features

- Suitable for injection moulding and extrusion applications

Availability

- LP: laser printable
- L: UV stabilized
- H: heat stabilized
- D: detergent stabilized
- All colours

Process

- INJECTION MOULDING
- EXTRUSION

Application

- General purpose applications
- Furniture
- Building
- Automotive

| Property | Method | Unit | Value | Condition | State |
|--------------------------------|-----------------|-------------------|-------|-----------------|-------|
| PHYSICAL | | | | | |
| Density (+23°C) | ISO 1183 | g/cm ³ | 1,05 | | |
| 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 | 3 | 230°C - 2,16 kg | |
| MECHANICAL | | | | | |
| Tensile Modulus | ISO 527-1,2 | MPa | 2700 | Speed 1 mm/min | |
| Tensile Yield Strength | ISO 527-1,2 | MPa | 34 | Speed 50 mm/min | |
| Elongation at Break | ISO 527-1,2 | % | 20 | Speed 50 mm/min | |



PRODUCT INFORMATION

HAIPLEN H10 T4

| | | | | |
|-----------------------|-----------|-----|------|----------------|
| Flexural Modulus | ISO 178 | MPa | 2600 | Speed 1 mm/min |
| Flexural Max Strength | ISO 178 | MPa | 50 | 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 | 75 | |
| Coefficient of linear thermal expansion (parallel) | ISO 11359-1,-2 | K ⁻¹ | 6X10exp(-5) | |

FLAMMABILITY

| | | | | |
|-----------------------------|----------|--------|------|----------------|
| Flame Behaviour (1,6 mm) | UL94 | Class | HB | |
| Burning Rate (US-FMVSS 302) | ISO 3795 | mm/min | <100 | Thickness 2 mm |

EXTRUSION

| | Value |
|---|-------------|
| Drying Time (Circulating Air Oven) | 80 - 90°C |
| Drying Temperature (Circulating Air Oven) | 3 h |
| Melt Temperature | 190 - 210°C |
| Feed Temperature | 160°C |
| Rear Temperature | 170°C |
| Middle Temperature | 180°C |
| Front Temperature | 190°C |
| Die Temperature | 200°C |

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.



PRODUCT INFORMATION

HAIPLEN H10 T4

| INJECTION MOULDING | Value |
|---|--------------|
| Drying Temperature (Circulating Air Oven) | 80 - 90°C |
| Drying Time (Circulating Air Oven) | 2 h |
| Melt Temperature | 200 - 210°C |
| Feed Temperature | 160°C |
| Rear Temperature | 170°C |
| Middle Temperature | 190°C |
| Front Temperature | 200°C |
| Nozzle Temperature | 210°C |
| Mould Temperature | 40 - 60°C |
| Injection Rate | MEDIUM |

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.