

Product Information (Preliminary)

Product description

INNOPOL® CS 1-3750 HFR is a 20% mineral filled and halogen-free flame retarded polypropylene homopolymer compound. This grade is available in nature and custom coloured form.

Recommended application

INNOPOL® CS 1-3750 HFR is recommended for producing injection moulded products, where the required properties are excellent flame retardancy (acc. to UL-94 is V-0) besides balanced physical properties.

Physical properties/Typical values	Test method	Unit	Mean value
Properties			
Abbreviated term	ISO 1043	-	PPH TD20 FR
Colour	-	-	nature
Density 23°C	ISO 1183	g/cm ³	1.12
Rheology			
Melt Mass Flow Rate MFR (230°C/2,16kg)	ISO 1133	g/10 min	12
Mechanical properties			
Tensile Stress at Yield (50 mm/min)	ISO 527-1,-2	MPa	19
Tensile Strain at Yield (50 mm/min)	ISO 527-1,-2	%	3
Tensile Modulus (2 mm/min)	ISO 527-1,-2	MPa	2400
Notched Impact Strength Charpy 23°C	ISO 179/1eA	kJ/m ²	1.7
Notched Impact Strength Charpy -20°C	ISO 179/1eA	kJ/m ²	1,22
Impact Strength Charpy 23°C	ISO 179/1eU	kJ/m ²	16,5
Flexural Modulus (2 mm/min)	ISO 178	MPa	2550
Thermal properties			
Heat Deflection Temperature 1,8 MPa (HDT/A)	ISO 75-1,-2	°C	53
Heat Deflection Temperature 0,45 MPa (HDT/A)	ISO 75-1,-2	°C	104
Vicat Softening Point, A-120	ISO 306	°C	150
Flammability			
Burning Behaviour (d=3,2 mm & 1,6 mm)	UL-94	Class	V-0
GWIT (Glow Wire Ignition Temperature)	IEC 60695-2-13	°C	880

Data contain above represent typical values of individual properties. They are informative, please do not construe as specifications.

MFR is measured at 230°C under a load of 2.16 kg with standard nozzle having a diameter of 2.095 mm.

Average mechanical property values of several measurements carried out on standard injection moulded specimens (ISO 3167) conditioned at room temperature (ISO 291).

Physical form and storage

Standard packaging includes the 25 kg bags, the 1000 kg octabin (octagonal container) or the 1250 kg big-bag. All containers are tightly sealed and should be opened only immediately prior to processing.

INNOPOL® CS 1-3750 HFR should generally have a moisture content of less than 0.07% when being processed. In order to ensure reliable production pre-drying is suggested before processing of material at 80°C/2h.

INNOPOL® CS 1-3750 HFR should be stored in dry conditions at temperatures below 60°C and protected from UV-light. The quality of product may suffer due to storage under improper condition.

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Recommended processing parameters

INNOPOL® CS 1-3750 HFR is easy to be processed with standard injection moulding machines.

The following parameters should be used as guidelines:

Barrel temperatures	190 – 230°C
Polymer melt temperature	210 – 240°C
Mould temperature	10 – 50°C
Injection speed	intermediate, depend on the mould design
Hold pressure	50 – 100 % of actual injection pressure

Product safety

For detailed safety information, see Safety Data Sheet, which is available on request.

Note

All information provided herein is based on our best knowledge, experience and laboratory test results. However, Inno-Comp Kft. shall be in no even responsible or liable for misunderstood data or for inefficient application.

In order to check the availability of products, please, contact us:

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