INNOPOL® CS B0-3910 VH

Development Data Sheet

Product description

10% natural fiber filled compound based on polylactic acid polymer. This grade is nature, but it is available in other colours as well.

Special Feature

biocomposite

Typical customer application

Injection moulding

Typical values	Test method	Unit	Value
General			
Abbreviated term	ISO 1043	-	PLA-NF10
Physical			
Melt Flow Rate MFR (210°C/2,16kg)	ISO 1133	g/10 min	12
Density 23°C	ISO 1183	g/cm^3	1.2
Mechanical			
Tensile Modulus (1A/1mm/min)	ISO 527-1,-2	MPa	3800
Tensile Stress at Yield (1A/50 mm/min)	ISO 527-1,-2	MPa	60
Tensile Strain at Yield (1A/50 mm/min)	ISO 527-1,-2	%	2
Tensile Stress at Break (1A/50 mm/min)	ISO 527-1,-2	MPa	60
Tensile Strain at Break (1A/50 mm/min)	ISO 527-1,-2	%	2.1
Flexural Strength (1A/2mm/min)	ISO 178	MPa	97
Flexural Modulus (1A/2mm/min)	ISO 178	MPa	4100
Charpy Impact			
Notched Impact Strength at 23°C	ISO 179-1/1eA	kJ/m^2	2.3
Notched Impact Strength at -20°C	ISO 179-1/1eA	kJ/m^2	2.7
Unnotched Impact Strength at 23°C	ISO 179-1/1eU	kJ/m^2	12
Unnotched Impact Strength at -20°C	ISO 179-1/1eU	kJ/m^2	12
Thermal			
Heat Deflection Temperature 0,45 MPa	ISO 75B-1,-2	°C	53
Heat Deflection Temperature 1,8 MPa	ISO 75A-1,-2	°C	51

The data presented is based on less than six lots of material and both the product and its properties may be subject to change prior to t commercialization.

Data contain above represent typical values of individual properties. They are informative, please do not construe as specifications. Average mechanical property values of several measurements carried out on standard injection moulded specimens (ISO 3167) conditioned at room temperature (ISO 291).

*Moulding shrinkage is not an intrinsic property of plastic. It also depends on moulding parameters. The value reported have been calculated in the direction parallel and cross to the flow in 2.0 x 60 x 60 mm plate.

Packaging and storage

Standard packaging includes small and big bags, octabins (octagonal container) or silo trucks depend on the customer request.

Improper storage may affect the quality of our raw materials. Our raw materials should be stored in a dry, well-ventilated, and sheltered location. Storage temperatures should be between -20 °C and +50 °C. The material should be protected from UV radiation and kept away from direct flame and other sources of ignition.

If the raw materials are stored in a location with high humidity and at fluctuating temperatures, atmospheric moisture may condense inside the packaging. This problem is solved by ensuring storage of the materials inside the plant 24 hours before processing or with drying.

The recommended shelf life for our raw materials is one year for unopened packaging. For longer storage times, it is advisable to check the properties of the material before processing. If necessary, a sample for re-qualification may be sent to Inno-Comp Kft. as well.

Processing parameters - Guidelines

This grade is easy to process with standard injection moulding machines.

Recommended Processing parameters	
Pre-drying	
Temperature/Time	80 °C/4hr
Injection	
Barrel temperatures	160 – 200 °C (200 °C not exceed!)
Polymer melt temperature	170 – 200 °C
Mould temperature	40 °C
Injection speed	high enough to fill the cavity in 1-2 seconds

Note

All information provided herein is based on our best knowledge, experience, and laboratory test results. However, Inno-Comp Kft. shall be in not even responsible or liable for misunderstood data or for inefficient application.

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

INNO-COMP KFT.
H-3580 Tiszaújváros, Vegyészek útja 8.
Telephone: +36-49-542-084
Fax: +36-49-522-509
Website: www.inno-comp.hu