Kareline® PPMS5050 EC

Polypropylene Homopolymer

Plasthill Oy

Message:

Kareline® PPMS composites are a family of injection mouldable natural fibre reinforced thermoplastic composites.
Kareline® PPMS EC gives exceptionally "natural/wild" appearance to moulded products (e.g. Kupilka, www.kupilka.fi). It can be coloured to "earth-colours".
Kareline® PPMS COW is a natural white material with "egg shell-like" surface pattern. It can be easily coloured.
When especially bright colours are needed, Kareline® PPMS CO is the right material.
The matrix plastic of all Kareline ® PPMS composites is polypropylene. Polypropylene is homopolymer (Kareline PPMS EC) or copolymer grade (Kareline PPMS COW and CO).
The fibre used is ECF bleached long fibre Nordic soft wood pulp (cellulose). The fibre content of Kareline® PPMS composites is 10-55 weight% (for example Kareline® PPMS 5050 EC, Kareline® PPMS7525 COW). Customer tailor made grades are also available.
Kareline® PPMS composites are suitable for a wide variety of applications e.g. furniture, decorations, garden furniture and tools, interior design, handles of tools, technical applications, household applications, different appliances, in sauna and bathrooms, applications where glass reinforced PP is used.
If needed, it is possible to have Kareline ® PPMS products with very beautiful and living surface structure and colours using Kareline ® PPMS5050 EC modified composite.
Kareline® PPMS composites have a lot of good properties:
High rigidity
Good thermal properties
Good mechanical properties
Good chemical resistance
Small shrinkages in injection moulding
Very small thermal expansion. Good dimensional stability
No sink marks in moulded parts, even in very thick walls
Pleasant feel and appearance of surface; if needed very beautiful living/natural surface is possible
It is not recommended to use Kareline® PPMS under the following conditions:
very low temperatures (under -25)
Together with strongly oxidicing chemicals

General Information	
Filler / Reinforcement	Wood Fiber
Features	Electrically Insulating
	Food Contact Acceptable
	Good Chemical Resistance
	Good Dimensional Stability
	Good UV Resistance
	Good Weather Resistance
	High Rigidity
	Homopolymer
	Low Shrinkage
	Low Toxicity
	Machinable
	Paintable
	Pleasing Surface Appearance
	Renewable Resource Content
	Thermally Insulating
	Ultrasonic Weldable

Uses	Appliances Bathroom Accessories Decorative Parts Furniture Handles Household Goods Lawn and Garden Equipment

Appearance	Brown
Forms	Pellets
Processing Method	Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (200°C/10.0 kg)	9.60	cm³/10min	ISO 1133
Molding Shrinkage	0.50	%	
Water Absorption [1] (Saturation, 23°C)	0.20	%	

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1700	MPa	ISO 527-2
Tensile Stress (Yield)	43.0	MPa	ISO 527-2
Tensile Strain (Yield)	3.0	%	ISO 527-2
Flexural Modulus	4700	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	2.4	kJ/m²	ISO 179

Thermal	Nominal Value	Unit
Continuous Use Temperature	-25.0 to 120	°C
CLTE - Flow	5.2E-5	cm/cm/°C

Flammability	Nominal Value		Test Method
Flame Rating	HB		UL 94

Injection	Nominal Value	Unit
Drying Temperature	80.0 to 100	°C
Drying Time	4.0 to 8.0	hr
Rear Temperature	180	°C
Middle Temperature	190	°C
Front Temperature	195	°C
Nozzle Temperature	200	°C
Processing (Melt) Temp	< 210	°C
Mold Temperature	20.0 to 40.0	°C
Injection Pressure	< 100	MPa

NOTE	
1.	72 hrs

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China