

Product Information

VESTAMID® L1930 black 9.7503

Heat-stabilized, glass fiber-reinforced polyamide 12 compound

VESTAMID L1930 black 9.7503 is a heat-stabilized, with 30% milled glass fibers reinforced PA 12 compound suitable for injection molding.

Due to the reinforcement moldings from this compound exhibit a high strength and rigidity. Because PA 12 absorbs only little water, the parts have a good dimensional stability and almost unaffected mechanical properties at changing ambient humidity.

Due to the reinforcement the shrinking of moldings is decreased compared with unreinforced compounds. Using specialty short glass fibers for the reinforcement of VESTAMID L1930 black 9.7503 the difference between longitudinal and transverse shrinkage relating to the flow direction of the melt is significantly lower than with common glass fiber reinforced products. Therefore especially low-warping precision parts can be molded.

As a semi-crystalline material VESTAMID L1930 black 9.7503 feature an outstanding chemical resistance, e.g., against fuels, oils and fats.

VESTAMID L1930 black 9.7503 is supplied as cylindrical granules, ready for processing in moisture-proof packaging.

Property	Test method			Unit	VESTAMID L1930 black 9.7503
		international	national		
Density	23°C	ISO 1183	DIN EN ISO 1183	g/cm ³	1.24
Tensile test		ISO 527-1	DIN EN ISO 527-1		
Stress at yield		ISO 527-2	DIN EN ISO 527-2	MPa	69
Strain at yield				%	4
Strain at break				%	12
Tensile modulus		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2	MPa	4000
CHARPY impact strength		ISO 179/1eU	DIN EN ISO 179/1eU		
	23°C			kJ/m ²	70 C ¹⁾
	-30°C			kJ/m ²	65 C ¹⁾
CHARPY notched impact strength		ISO 179/1eA	DIN EN ISO 179/1eA		
	23°C			kJ/m ²	7 C ¹⁾
	-30°C			kJ/m ²	6 C ¹⁾
Temperature of deflection under load		ISO 75-1 ISO 75-2	DIN EN ISO 75-1 DIN EN ISO 75-2		
Method A	1.8 MPa			°C	130
Method B	0.45 MPa			°C	170
Vicat softening temperature		ISO 306	DIN EN ISO 306		
Method A	10 N			°C	175
Method B	50 N			°C	170
Volume resistivity		IEC 60093	IEC 60093	Ohm · m	10 ¹⁵
Surface resistance R _{0A}		IEC 60093	IEC 60093	Ohm	10 ¹³
Water absorption		ISO 62	DIN EN ISO 62		
saturation				%	1.1
Moisture absorption		ISO 62	DIN EN ISO 62		
23°C/50 % r.h.				%	0.5
Mold shrinkage		determined on 2 mm sheets with film gate at rim mold temperature 80°C			
in flow direction				%	0.7
in transverse direction				%	0.6
		ISO 294-4			

¹⁾ C = Complete break, incl. hinge break H