

TECHNICAL DATA SHEET

TECHNYL C 249SIL1 V30 ORANGE 2130
(Previously DOMAMID 6G30IK1H1UV1 EMK)

Polyamide 6, 30% glass fiber reinforced, heat-aging stabilized, UV-stabilized, low temperature impact modified, for injection moulding

General

Feature	Heat-aging stabilized	Low temperature impact modified
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS	

Product identification

ISO 1043 abbreviation	PA6-I-GF30
ISO 16396 designation	PA6-I,GF30,M1HL1,S14-090

Condition	Standard	Unit	Value
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Physical properties

Density		ISO 1183	g/cm³	1.32
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.4 - 0.6
Molding shrinkage, normal		ISO 294-4, 2577	%	0.9 - 1.1
Melt volume-flow rate, MVR, 5.0 kg	275°C, 5kg	ISO 1133	cm³/10 min	25
Viscosity number	96% H2SO4	ISO 307	cm³/g	145

Mechanical properties

dam / cond.*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	8600 / 5400
Stress at break	5 mm/min	ISO 527-1/-2	MPa	130 / 95
Strain at break	5 mm/min	ISO 527-1/-2	%	4.5 / 7.5
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7700 / 4700
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	225 / 125
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	100 / 120
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	21 / 35
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	13 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m²	90 / 105
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	20 / 35

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	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	210
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	195
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	205

Electrical properties

Volume resistivity		IEC 62631-3-1	ohm.m	1E+013
Surface resistivity		IEC 62631-3-1	ohm	1E+013

Burning behaviour

Flammability, 0.75 mm	0.75 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

Test run at 23°C if not differently specified, DAM state (dry as moulded), valid for natural colored products.
*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	90 - 120 °C

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

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