Orgalloy® LT 5050 T6L NAT

PA6... ARKEMA

Product Texts

Orgalloy® LT 5050 T6L NAT resin is a polyamide alloy especially designed for tube extrusion. This natural grade dedicated to extrusion offers good barrier properties and chemical resistance to oils and HFC gas, a high thermal resistance and flexibility.

Main applications:

- Barrier layer for air conditionning hoses
- Barrier layer for LPG lines

Packaging:
This grade is delivered dried in sealed packaging (25kg bags) ready to be processed.

Shelf life:
Two years from the date of delivery. For any use above this limit, please refer to our technical services.

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**1.8 / ***	cm³/10min	ISO 1133
Temperature	**235 / ***	°C	-
Load	**5 / ***	kg	-

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**- / 470**	MPa	ISO 527
[C] Yield stress	**- / 18**	MPa	ISO 527
[C] Yield strain	**- / 31**	%	ISO 527
[C] Nominal strain at break	**- / >50**	%	ISO 527
[C] Tensile creep modulus, 1h	*** / 420**	MPa	ISO 899-1
[C] Tensile creep modulus, 1000h	*** / 270**	MPa	ISO 899-1
[C] Charpy notched impact strength, +23°C	**76 / 82**	kJ/m²	ISO 179/1eA
[C] Charpy notched impact strength, -30°C	**28 / 30**	kJ/m²	ISO 179/1eA
[C] Shore D hardness	**55 / ***	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Melting temperature, 10°C/min	**220 / ***	°C	ISO 11357-1/-3
[C] Vicat softening temperature, B	**75 / ***	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**170 / ***	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**180 / ***	E-6/K	ISO 11359-1/-2
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB / ***	class	IEC 60695-11-10
Thickness tested	**1.6 / ***	mm	-
[C] Burning Behav. at thickness h	**HB / ***	class	IEC 60695-11-10
Thickness tested	**3.2 / ***	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
[C] Relative permittivity, 100Hz	**- / 4**	-	IEC 62631-2-1
[C] Relative permittivity, 1MHz	**- / 4**	-	IEC 62631-2-1
[C] Dissipation factor, 100Hz	**- / 1100**	E-4	IEC 62631-2-1
[C] Dissipation factor, 1MHz	**- / 500**	E-4	IEC 62631-2-1
[C] Volume resistivity	**- / 7.4E11**	Ohm*m	IEC 62631-3-1
[C] Surface resistivity	*** / >1E15**	Ohm	IEC 62631-3-2
[C] Electric strength	**36 / 36**	kV/mm	IEC 60243-1
[C] Comparative tracking index	*** / 600**	-	IEC 60112

[C]: CAMPUS

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Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	**5.6 / ***	%	Sim. to ISO 62
[C] Humidity absorption	**2 / ***	%	Sim. to ISO 62
[C] Density	**1040 / 1040**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Calandering, Transfer Molding, Thermoforming

Special Characteristics
Light stabilized or stable to light, U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Delivery form
Pellets, Natural Color

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information

Other extrusion

Processing conditions:
- Drying time (only necessary for bags opened for more than two hours): 4-8 hours at 80°C
- Extrusion melt temperature (min-recommended-max): 250-260-270°C

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