

TECHNICAL DATA SHEET

ORGALLOY® LE 6000 NAT

POLYAMIDE ALLOY PELLET

ORGALLOY® LE 6000 NAT is a polyamide alloy. This natural grade designed for designed for cable sheathing & blown film extrusion and offers excellent barrier properties and chemical resistance to hydrocarbons, alcohols and solvents.

TYPE

PA*

MAIN APPLICATIONS

- Performance Wire
- Cable
- Molding
- Film
- Industry - Distribution
- Auto Enging Cooling
- Auto - Others Injection
- Others - Filtration

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Sheet Extrusion
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	2.5	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Hardness, Shore D, 15 s	66 / -		ISO 868
Charpy unnotched impact strength, 23°C (73°F)	No Break / No Break		ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No Break / No Break		ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	29 / 35	kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	11 / 11	kJ/m2	ISO 179 1eA
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50	%	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	4 / 7	%	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	44 / 36	MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	1815 / 1400	MPa	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 800	MPa	ISO 178

*DRY: Dry As Molded (DAM) if pellet / Dry if powder.
COND: Conditionned.

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THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Vicat softening temperature, 50N at 50°C/h	118	°C	ISO 306
Heat deflection temperature, 0.45 MPa	84	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	50	°C	ISO 75-1/-2
Melting temperature, 10°C/min	220	°C	ISO 11357-1/-3

ELECTRICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Comparative tracking index, 23°C (73°F)	- / 600		IEC 60112

*DRY: Dry As Molded (DAM) if pellet / Dry if powder.
COND: Conditionned.

OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	2.5	%	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	7	%	ISO 62
Specific gravity, 23°C (73°F)	1.04	g/cm ³	ISO 1183-1

PACKAGING

Available packaging:

- 25 kg / 55 lb bags

SHELF LIFE

Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

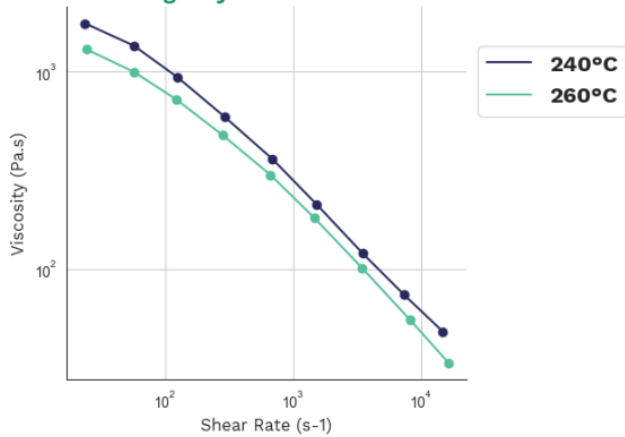
PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

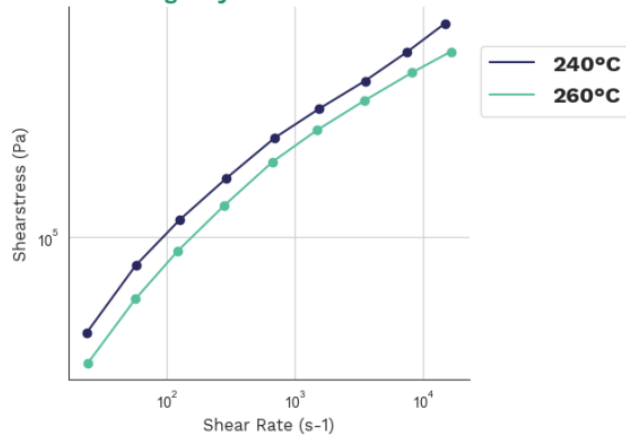
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DIAGRAMS

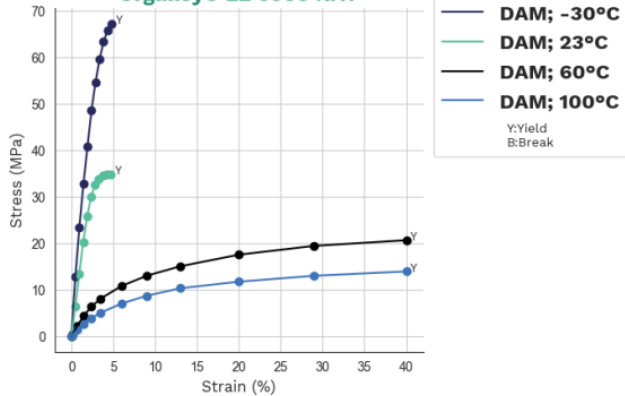
Viscosity-shear rate
Orgalloy® LE 6000 NAT



Shearstress-shear rate
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Stress-strain
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Dynamic Shear modulus-temperature
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