

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.

DESIGNATION

PA*

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Extrusion - General
- Sheet Extrusion
- Tube Extrusion

ADDITIVES

- Heat Stabilized
- Light Stabilized

RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	2.5 cm³/10min	ISO 1133

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
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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속성	값	테스트 표준
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

THERMAL PROPERTIES/ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Comparative tracking index, 23°C (73,4°F)	- / 600	IEC 60112

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

OTHER PROPERTIES

속성	값	테스트 표준
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

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 26 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.

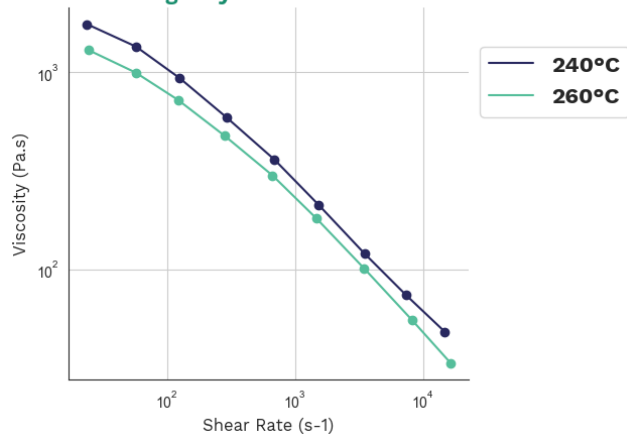
PROCESSING CONDITIONS:

- 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

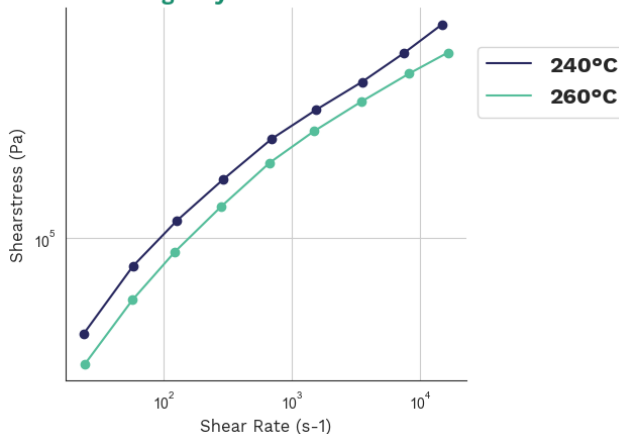
ORGALLOY® LE 6000 NAT

DIAGRAMS

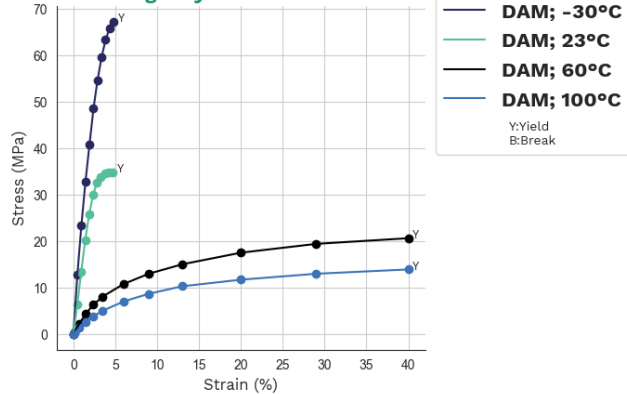
**Viscosity-shear rate
Orgalloy® LE 6000 NAT**



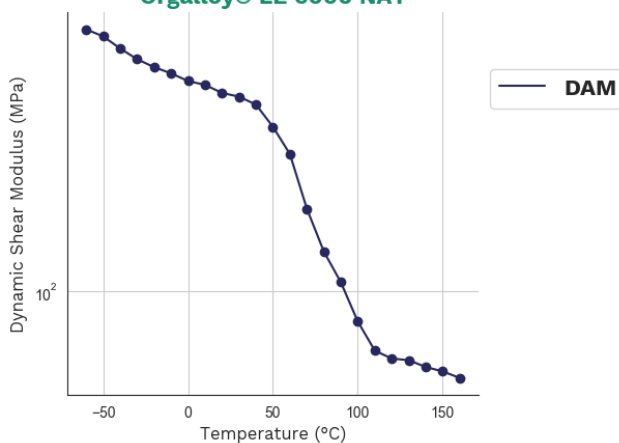
**Shearstress-shear rate
Orgalloy® LE 6000 NAT**



**Stress-strain
Orgalloy® LE 6000 NAT**



**Dynamic Shear modulus-temperature
Orgalloy® LE 6000 NAT**



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