

TECHNICAL DATA SHEET

ORGALLOY® LE 60 LM XV NAT

POLYAMIDE ALLOY PELLET

ORGALLOY® LE 60 LM XV NAT is a polyamide alloy. This natural plasticized grade is designed for extrusion and offers excellent barrier properties and chemical resistance to hydrocarbons, alcohols and solvents while exhibiting good flexibility.

TYPE

PA*

MAIN APPLICATIONS

- Chemical & Plastic Distribution

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)	3.5	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	DRY / COND VALUE*	UNIT	TEST STANDARD
Yield stress, 23°C (73°F), 50 mm/min	28 / 24	MPa	ISO 527-1/-2
Charpy unnotched impact strength, -30°C (-22°F)	No Break / No Break		ISO 179 1eU
Charpy unnotched impact strength, 23°C (73°F)	No Break / No Break		ISO 179 1eU
Charpy notched impact strength, -30°C (-22°F)	12 / 12	kJ/m2	ISO 179 1eA
Charpy notched impact strength, 23°C (73°F)	82 / 89	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	23 / 28	%	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 350	MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	850 / 650	MPa	ISO 527-1/-2

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

ORGALLOY® LE 60 LM XV NAT

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Coefficient of linear thermal expansion	200	10E-6 / °K	ISO 11359-1/-2
Heat deflection temperature, 0.45 MPa	55	°C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	38	°C	ISO 75-1/-2
Vicat softening temperature, 50N at 50°C/h	86	°C	ISO 306
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
Water absorption, 23°C (73°F), immersion, equilibrium	5.8	%	ISO 62
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	2.1	%	ISO 62
Specific gravity, 23°C (73°F)	1.04	g/cm ³	ISO 1183-1

PACKAGING

Available packaging:

- 25 kg / 55 lb bags
- 500 kg / 1100 lb rigid containers

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

REGIONAL AVAILABILITY

Israel, Mali, Nigeria

ORGALLOY® LE 60 LM XV NAT

DIAGRAMS

