

# ORGALLOY®

## LE 60 LM XV NAT

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

PROPERTIES	DRY / COND	UNIT	TEST STANDARD
<b>RHEOLOGICAL PROPERTIES</b>			
Melt Volume-Flow Rate	3.5 / *	cm <sup>3</sup> /10 min	ISO 1133
Temperature	235 / *	°C	-
	455 / *	°F	
Load	2.16 / *	kg	-
	4.76 / *	lb	
<b>MECHANICAL PROPERTIES</b>			
Tensile Modulus	850 / 650	MPa	ISO 527-1/-2
	123000 / 94300	psi	
Yield Stress	28 / 24	MPa	ISO 527-1/-2
	4060 / 3480	psi	
Yield Strain	23 / 28	%	ISO 527-1/-2
Nominal Strain at Break	>50 / >50	%	ISO 527-1/-2
Charpy Impact Strength, +23°C	No Break / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Impact Strength, -30°C	No Break / No Break	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy Notched Impact Strength, +23°C	82 / 89	kJ/m <sup>2</sup>	ISO 179/1eA
	39 / 42.3	ftlb/in <sup>2</sup>	
Charpy Notched Impact Strength, -30°C	12 / 12	kJ/m <sup>2</sup>	ISO 179/1eA
	5.71 / 5.71	ftlb/in <sup>2</sup>	
<b>THERMAL PROPERTIES</b>			
Melting Temperature, 10°C/min	220 / *	°C	ISO 11357-1/-3
Temp. of Deflection Under Load, 1.80 MPa	38 / *	°C	ISO 75-1/-2
	100 / *	°F	
Temp. of Deflection Under Load, 0.45 MPa	55 / *	°C	ISO 75-1/-2
	131 / *	°F	
Vicat Softening Temperature, 50°C/h 50N	86 / *	°C	ISO 306
	187 / *	°F	
Coeff. of Linear Thermal Expansion, parallel	200 / *	E-6/K	ISO 11359-1/-2
Burning Behav. at 1.5 mm Nominal Thickness	HB / *	class	IEC 60695-11-10
Thickness Tested	1.6 / *	mm	-
	0.0630 / *	in	

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Burning Behav. at Thickness h	HB / *	class	IEC 60695-11-10
Thickness Tested	3.2 / *	mm	-
	0.1260 / *	in	
<b>ELECTRICAL PROPERTIES</b>			
Comparative Tracking Index	* / 600	-	IEC 60112
<b>OTHER PROPERTIES</b>			
Water Absorption, 23°C, immersion, equilibrium	5.8 / *	%	ISO 62
Humidity Absorption, 23°C, RH50%, equilibrium	2.1 / *	%	ISO 62
Density	1040 / 1040	kg/m³	ISO 1183
	1.04 / 1.04	g/cm³	

## MAIN APPLICATIONS:

- Hydraulic tubing
- Tapes for cable protection
- resistant to hydrocarbons

## PACKAGING:

This grade is delivered dried in sealed packaging (25kg bags and 500kg octabin) ready to be processed.

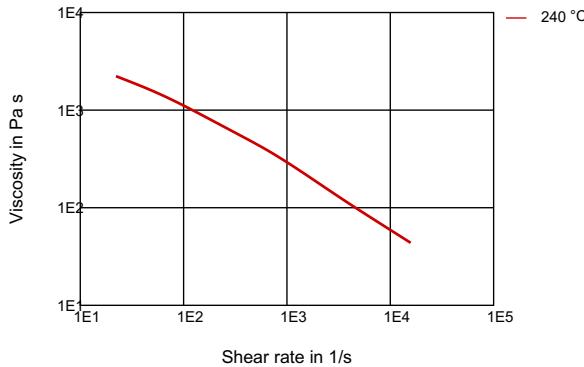
## SHELF LIFE:

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

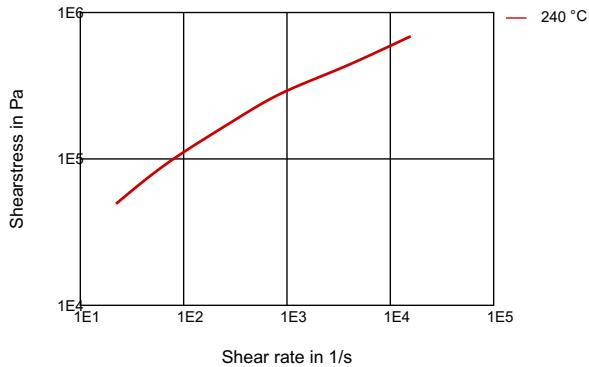
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## DIAGRAMS

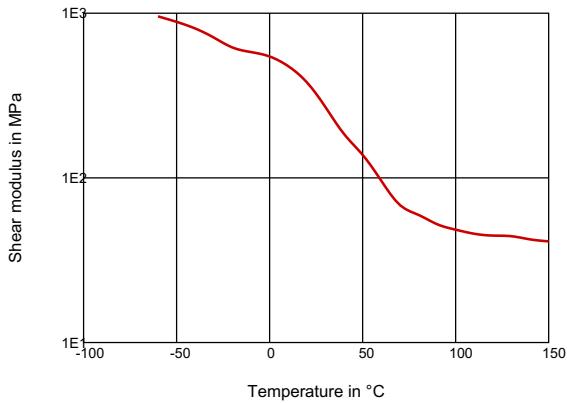
### VISCOSITY-SHEAR RATE



### SHEARSTRESS-SHEAR RATE



### DYN. SHEAR MODULUS-TEMPERATURE



#### 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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<b>PROCESSING</b>  Profile Extrusion, Sheet Extrusion, Other Extrusion, Transfer Molding	Headquarters:  Arkema France 420 rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 hpp.arkema.com
<b>DELIVERY FORM</b>  Pellets	Arkema Inc. – High Performance Polymers  900 First Avenue King of Prussia, PA 19406 Tel.: +1 610 205 7000 hpp.arkema.com
<b>ADDITIVES</b>  Plasticizer	
<b>SPECIAL CHARACTERISTICS</b>  Heat Stabilized, Light Stabilized	
<b>REGIONAL AVAILABILITY</b>  North America, Europe, Asia Pacific, South and Central America, Near East/Africa	

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