

TECHNICAL DATASHEET

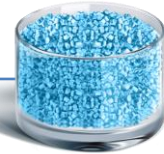
Agimid[®] 241 N070

Product information

Agimid[®] POLYAMIDE 12

The Agimid range holds 3 long-chain polymers including 2 bio-based materials which have a broad range of applications in key markets such as automotive & industrial vehicles, sports & leisure, electrical & electronics and industrial.

- Easy processability
- Very good mechanical properties
 - High abrasion resistance
 - Stable modulus with moist environment
- Remarkable physical resistance
 - Lightest engineering polymers
 - Low water absorption
- Very good chemical resistance
- High ageing resistance
- Wide range of temperature use



TRADEMARK	POLYMER		FLUIDITY		ADDITIVES		COLOUR		FLEXIBILITY		ADDITIVES	
Agimid	2	PA12	4	High viscosity	1	Any	N	Natural	070	Highly flexible	/	Any

Agimid 241 N070-S is a plasticized and impact modified PA12 extrusion grade.

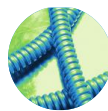
MAIN MARKETS



AUTOMOTIVE



INDUSTRIAL



ELECTRICAL & ELECTRONICS

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Agimid[®] 241 N070

Product properties

PROPERTY	TEST METHOD	VALUE
PHYSICAL PROPERTIES		
MELTING POINT	ISO 11357-1/-3	175 °C
DENSITY (23 °C)	ISO 1183	1,02 g/cm ³
WATER ABSORPTION (23 °C)	Similar to ISO 62	0,70% 1,50%
<ul style="list-style-type: none"> • with 50% of relative humidity • with 100% of relative humidity 		
THERMAL PROPERTIES		
HEAT DEFLECTION TEMPERATURE (HDT)	ISO 75 Method A ISO 75 Method B	45 °C 85 °C
<ul style="list-style-type: none"> • 1,85 MPa • 0,45 MPa 		
FLAME RESISTANCE	UL 94	HB HB
Thickness test piece		
<ul style="list-style-type: none"> • 3,2 mm • 1,6 mm 		
ELECTRICAL PROPERTIES		
VOLUME RESISTIVITY	ASTM D 257	10 ¹⁴ Ω.cm
SURFACE RESISTIVITY	ASTM D 257	10 ¹⁴ Ω
DIELECTRIC STRENGTH (dry state)	ASTM D 149	24 kV/mm
MECHANICAL PROPERTIES		
TENSILE MODULUS	ISO 527	580 MPa 43 MPa >100%
<ul style="list-style-type: none"> • Break strength • Break elongation 		
CHARPY IMPACT STRENGTH		
<ul style="list-style-type: none"> • Unnotched at +23 °C • Unnotched at -30 °C 	ISO 179	No break No break

The data given are based on our present knowledge and experience. They are published without obligation on our part and any liability will be assumed.

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Processing information

MACHINE			
GENERAL	All extruders suitable for polyamides can run the Agimid 241 N070		
SCREW TYPES	Screws with three zones (feeding, compression and metering zones) are recommended Length: 24 D - 25 D Compression ratio: 2.5 - 3.1		
MATERIAL			
STORAGE	Agimid 241 N070 has to be stored in dry, indoor and safe facilities. It is highly recommended to run granules having reached the workshop temperature to prevent from moisture condensing on cold granules		
DRYING	Agimid 241 N070 is dried and packed with a moisture content of less than 0.10 %. If the packing has been damaged or left open for a long time (>2 hours), then the material has to be dried. Polyamides are sensitive to oxidation at temperatures > 80°C in the oxygen atmosphere. To avoid yellowing of the granules (for natural color grades only), it is recommended to respect the following settings		
DRYING SETTINGS	<table border="1"> <tr> <td>AIR DRYER Temperature: max. 80°C Time: 4 - 8 hours</td> <td>VACUUM DRYER Temperature: max. 100°C Time: 2 - 4 hours</td> </tr> </table>	AIR DRYER Temperature: max. 80°C Time: 4 - 8 hours	VACUUM DRYER Temperature: max. 100°C Time: 2 - 4 hours
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LUBRICATION	Agimid 241 N070 includes internal lubricants. However, the use of Zinc Stearate or Calcium Stearate can be helpful in case of process instability (Weight rate: 0,05%)		
PROCESS (recommended basic settings)			
BASIC MACHINE SETTINGS	Hopper zone 60 - 90°C Feeding zone 200 - 225°C Compression zone 210 - 240°C Metering zone 210 - 240°C Head 200 - 220°C Melt 205 - 235°C		
COOLING BATH	15 - 30°C		

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