

TECHNICAL DATASHEET

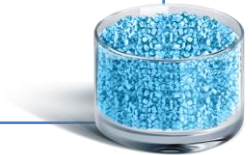
Agimid® 240 B120

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 aging resistance
- Wide range of temperature use



TRADEMARK	POLYMER		FLUIDITY		ADDITIVES	COLOUR		FLEXIBILITY		ADDITIVES
Agimid	2	PA12	4	High viscosity	0	B	Black	120	Highly flexible	/ Any

**Agimid 240 B120** is a plasticized, heat and light stabilized and impact modified product for extrusion. The main application is pneumatic tubes for industrial and automotive markets.

MAIN MARKETS



AUTOMOTIVE



INDUSTRIAL



ELECTRICAL & ELECTRONICS

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## Agimid<sup>®</sup> 240 B120

### Product properties

PROPERTY	TEST METHOD	VALUE
<b>PHYSICAL PROPERTIES</b>		
MELTING POINT	ISO 11357-1/-3	173 °C
DENSITY (23 °C)	ISO 1183	1,03 g/cm <sup>3</sup>
WATER ABSORPTION (23 °C)	Similar to ISO 62	0,70%
<ul style="list-style-type: none"> <li>with 50% of relative humidity</li> <li>with 100% of relative humidity</li> </ul>		1,40%
<b>THERMAL PROPERTIES</b>		
HEAT DEFLECTION TEMPERATURE (HDT)	ISO 75 Method A ISO 75 Method B	45 °C
<ul style="list-style-type: none"> <li>1,85 MPa</li> <li>0,45 MPa</li> </ul>		95 °C
FLAME RESISTANCE	UL 94	
Thickness test piece		
<ul style="list-style-type: none"> <li>3,2 mm</li> <li>1,6 mm</li> </ul>		HB HB
<b>ELECTRICAL PROPERTIES</b>		
VOLUME RESISTIVITY	ASTM D 257	10 <sup>14</sup> Ω.cm
SURFACE RESISTIVITY	ASTM D 257	10 <sup>14</sup> Ω
DIELECTRIC STRENGTH (dry state)	ASTM D 149	24 kV/mm
<b>MECHANICAL PROPERTIES</b>		
TENSILE MODULUS	ISO 527	420 MPa
<ul style="list-style-type: none"> <li>Break strength</li> <li>Break elongation</li> </ul>		39 MPa >100 %
CHARPY IMPACT STRENGTH		
<ul style="list-style-type: none"> <li>Unnotched at +23 °C</li> <li>Unnotched at -30 °C</li> </ul>	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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# Agimid<sup>®</sup> 240 B120

### Processing information

MACHINE			
GENERAL	All extruders suitable for polyamides can run the 240 B120		
SCREW TYPES	Screws with three zones (feeding, compression and metering zones) are recommended Length: 18 D - 22 D		
MATERIAL			
STORAGE	240 B120 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	240 B120 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.		
DRYING SETTINGS	<table border="1"> <tr> <td>AIR DRYER Temperature: max. 80°C Time: 4 - 8 hours</td> <td>VACUUM DRYER Temperature: max. 80°C Time: 2 - 4 hours</td> </tr> </table>	AIR DRYER Temperature: max. 80°C Time: 4 - 8 hours	VACUUM DRYER Temperature: max. 80°C Time: 2 - 4 hours
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LUBRICATION	240 B120 includes internal lubricants. However, the use of Zinc Stearate or Calcium Stearate can be helpful in case of process instability		
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 - 230°C Melt 205 - 235°C		
COOLING BATH	15 - 30°C		

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