

Agimid

The Agimid range holds 3 long-chain

polymers including 2 bio-based materials

which have a broad range of applications

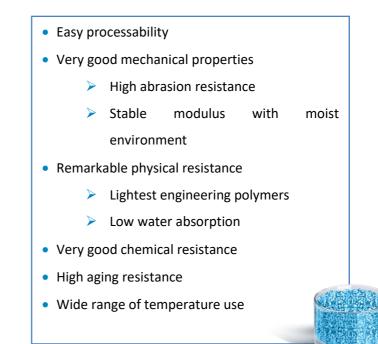
in key markets such as automotive & industrial vehicles, sports & leisure,

electrical & electronics and industrial.

**POLYAMIDE 12** 

## **TECHNICAL DATASHEET Agimid**<sup>®</sup> 2153 N00

### Product information



TRADEMARK	PC	DLYMER		FLUIDITY		ADDITIVES		COLOUR	FLE	XIBILITY	A	DDITIVES
Agimid	2	PA12	1	High fluidity	53	GF 30	N	Natural	00	Rigid	/	Any

Agimid 2153 NOO is a polyamide 12 reinforced with 30% of glass fibers dedicated to injection molding. The main applications are car keys and fittings for the automotive and industrial markets.

#### MAIN MARKETS



AUTOMOTIVE

AGIPLAST ITALIA S.R.L.



**INDUSTRIAL** 

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## **TECHNICAL DATASHEET**

# Agimid<sup>®</sup> 2153 N00

**Product properties** 

PROPERTY	TEST METHOD	VALUE					
P	PHYSICAL PROPERTIES						
MELTING POINT	ISO 11357-1/-3	178 °C					
DENSITY (23 °C)	ISO 1183	1,24 g/cm3					
WATER ABSORPTION (23 °C)							
• with 50% of relative humidity	Similar to ISO 62	0,60%					
• with 100% of relative humidity		1,20%					
THERMAL PROPERTIES							
HEAT DEFLECTION TEMPERATURE (HDT)							
• 1,85 MPa	ISO 75 Method A	160 °C					
• 0,45 MPa	ISO 75 Method B	165 °C					
FLAME RESISTANCE							
Thickness test piece							
• 3,2 mm	UL 94	-					
• 1,6 mm		НВ					
EL	ECTRICAL PROPERTIES						
VOLUME RESISTIVITY	ASTM D 257	10 <sup>13</sup> Ω.cm					
SURFACE RESISTIVITY	ASTM D 257	-					
DIELECTRIC STRENGTH (dry state)	ASTM D 149	35 kV/mm					
MECHANICAL PROPERTIES							
TENSILE MODULUS		7000 MPa					
Break strength	ISO 527	100 MPa					
Break elongation		5%					
CHARPY IMPACT STRENGTH							
<ul> <li>Unnotched at +23 °C</li> </ul>		75 kJ/m²					
<ul> <li>Unnotched at -30 °C</li> </ul>	ISO 179	80 kJ/m²					
<ul> <li>Notched at +23 °C</li> </ul>		16 kJ/m²					
<ul> <li>Notched at -30 °C</li> </ul>	····· <b>T</b> he second bit had the habit of the second	10 kJ/m <sup>2</sup>					

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.



# TECHNICAL DATASHEET Agimid<sup>®</sup> 2153 N00

Processing information

	MACHINE					
GENERAL	All injection machines suitable for polyamides can run the Agimid 2153 N00.					
SCREW TYPES	Screws with three zones (feeding,	compression and metering zones) are				
	recommended					
	Length: 18 D - 22 D					
MATERIAL						
STORAGE	TORAGE Agimid 2153 N00 has to be stored in dry, indoor and safe facilities.					
	It is highly recommended to run g	ranules having reached the workshop				
	temperature to prevent from moisture condensing on cold granules					
DRYING	Agimid 2153 N00 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 hour						
	material has to be dried.					
	Polyamides are sensitive to oxidation at temperatures > 80°C in the sensitive to oxidation at temperatures > 80°C in the sensitive temperatures are sensitive to oxidation at temperatures are sensitive to oxidation at temperatures are sensitive temperatures are sen					
	atmosphere.					
DRYING SETTINGS	AIR DRYER	VACUUM DRYER				
	Temperature: max. 80°C	Temperature: max. 80°C				
	Time: 2 - 8 hours	Time: 2 - 4 hours				
LUBRICATION	Agimid 2153 N00 includes internal lubricants and release agents.					
	PROCESS (recommended basic settir	ngs)				
BASIC MACHINE SETTINGS	eeding zone 240 - 260°C					
	Compression zone 250 - 270°C	pression zone 250 - 270°C				
	Metering zone 255 - 275°C					
	Melt temperature 260 - 280°C					
MOULD TEMPERATURE	80 – 90°C					

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