

# FORMPOLY® NYLON12

## GENERAL

FPL offers a wide range of Nylon12 grades from unfilled to glass fibre reinforced, including **FORMPOLY® N12GF30UV** which is glass filled Nylon 12 with good modulus and moderate mechanical properties.

### FORMPOLY® N12GF30UV

Higher Impact resistance  
Reduced sensitivity to notch  
Good finish and Gloss  
UV Stabilized  
Easy flow and fast solidification  
Low density  
Good fatigue behaviour  
High resistance to stress cracking

## PACKING

**FORMPOLY® N12GF30UV** is supplied in 25 Kgs. dry, ready to mould, in sealed bags to prevent the uptake of moisture.

## APPLICATION

OFC Sheathing  
Pneumatic tubing  
Air break tubing  
Cable sheathing  
Noiseless Gear/clips  
Heater Wire insulation

Property	Method	Unit	N12GF30UV
Tensile Strength	ISO 527	MPa	120
Elongation at Break	ISO 527	%	6
Tensile Modulus	ISO 527	MPa	6500
Flexural Strength	ISO 178	MPa	160
Flexural Modulus	ISO 178	MPa	6000
Izod Impact Strength-Notched	ISO 180	kg.cm/cm	23
Density	ISO 1183	g/cc	1.24
Moisture absorption	ISO 62	%	0.6
Water Absorption	ISO 62	%	1.1
Mould Shrinkage-Flow	FPL	%	0.3-0.5
Mould Shrinkage-Across Flow	FPL	%	0.8-1.0
Flammability @ 3mm	UL94	-	HB

Conditioned test specimen. All results are measured under Dry-as-moulded natural test specimen Coloured grades would record slightly lower mechanical properties as permitted by ASTM D-4066

The information present here is for general guidance. It is given in good faith but no warrant is attached

## FORMULATED POLYMERS LIMITED

Manufacturers of Engineering Plastics Compounds

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ISO 9001:2015, IATF 16949: 2009 & ISO 14001: 2015 Certified Firm



**PROCESSING OF FORMPOLY NYLON 12**

FORMPOLY® grades can be processed in extruders with min L/D of 24 with compression ratio of 3.0 to 3.5. Material can be processed with zone temperature from 210 °C to 230 °C.

**PRE-DRYING**

FPL grades can normally be taken for direct processing. However, in case the material is exposed to atmosphere, it is advisable to pre-dry the material at 80°C for 2 to 3 hours for good surface finish.

**PROCESS PARAMETERS SUGGESTED**

PROCESSING PARAMETERS	
ZONE1	190 -200°c
ZONE2	190-200°c
ZONE3	190 -200°c
ZONE4	200-215°c
Flange 1	200-215°c
Flange 2	200-215°c
Die	215-230°c
Vacuum	0.1 -0.2 bar
Water Temperature	15° c- 25°c

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