



## TECHNYL 2412GFH6

### Description

TECHNYL® 2412GFH6 is a Polyamide 66, reinforced with 33% of glass fiber, for injection molding.

This product is available in bright (natural) & black color.

### Benefits

This grade offers an excellent combination between thermal stability and mechanical properties.

### Applications

It is used in all sectors of industry, widely used for:

- Hot water distributor pipe, Motor holder for boiler

### Key Properties

General purpose  
Excellent combination between thermal & mechanical properties

### Regional Availability

Asia / Pacific

## Properties

Typical values of properties are for black grades

	Standards	Unit	Values	
			d.a.m.	Cond.
<b>Physical</b>				
Water absorption(24h at 23°C)	ASTM D-792	%	0,80	
Density	ASTM D-792	g/cm3	1,37	
Molding shrinkage Parallel	RHODIA	%	0,50	
Molding shrinkage normal or perpendicular	RHODIA	%	0,50	
<b>Mechanical</b>				
Tensile strength at yield	ASTM D-638	MPa	200	
	ISO 527 Type 1A	MPa	200	
Elongation at break	ASTM D-638	%	3,50	
	ISO 527 Type 1A	%	3	
Flexural modulus	ASTM D-790	MPa	9700	
	ISO 178	MPa	9300	
Flexural maximum stress	ASTM D-790	MPa	300	
	ISO 178	MPa	270	
Charpy notched impact strength	ISO 179/1eA	kJ/m2	13,5	
Izod notched impact strength	ASTM D256	J/m	130	
	ISO 180/1A	kJ/m2	13	
Rockwell Hardness	ASTM D-786	R scale	122	
<b>Flammability</b>				
Flammability (Thickness: 0,8 mm)	ISO 1210 / UL94			HB
Glow Wire Flammability Index (Thickness: 1,6 mm)	IEC 60695-2-12	°C	700	
Limit Oxygen Index	ISO 4589		23	
<b>Thermal</b>				
Melting Temperature	ISO 11357	°C	262	
Heat deflection temperature (1,82 MPa)	ASTM D-648	°C	252	
	ISO 75/Af	°C	255	
Coef of Linear thermal expansion normal or perpendicular (23°C to 85°C)	ISO 11359	E-5/°C	2,5	
<b>Electrical</b>				
Comparative tracking index (Sol A)	IEC 60112	V	450	425
Comparative tracking index (Sol B)	IEC 60112	V	350	
Dielectric strength	IEC 60243	kV/mm	34	29
Dissipation factor	IEC 60250		0,010	0,110
Surface resistivity	IEC 60093	Ohm	6E 14	1E 12
Volume resistivity	IEC 60093	Ohm/cm	1E 15	1E 13

	Standards	Unit	Values	
			d.a.m.	Cond.
<b>Specific</b>				
Identification code			PA66-GF33	

d.a.m. = dry as moulded

Cond = conditioned

## Processing Guide

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment.

Recommended Maximum water content: 0,2 %

Drying conditions: 80 °C

### Recommended moulding conditions

Barrel Temperatures:

- feed zone 270 - 280 °C

- compression zone 275 - 285 °C

- mixing zone 280 - 290 °C

Mould temperatures: 70 - 100 °C

**Steel advice for tools** For reinforced polyamide (glass fibre, glass sphere, mineral fibre...), Solvay recommends the use of steel with a high content of Carbon and purified for polishing to avoid or limit the abrasion. For example: Z38CDV5W or Z160CDV12.

## Disclaimer

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and it is in no way binding. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for a given use. ANY WARRANTY OF PRODUCT PERFORMANCE, MERCHANDABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorizations. Users are requested to check that they are in possession of the latest version of this document, and Solvay is at their disposal to supply any additional information.

## Safety information

Detailed information regarding safety are available on the safety data sheet (SDS).  
SDS is sent with the first material order, or available by contacting our customer services

## Regulations compliance

Grades produced or imported in Europe comply with directive 453/2010/EC, which amends REACH directive 1907/2006/EC

This grade complies with RoHS directive 2002/95/EC

Unless specified, this grade is not suitable for food contact, medical devices or toy applications

## Customer services

Our customer services are not only concerned with manufacturing and supply of Engineering Plastics products. We are available to assist our customers in finding technical solutions that meet their requirements. Specific support is in particular offered on:

- Material selection
- Material testing
- Parts design advice, training for design engineers
- Part testing
- Processing through different technologies
- Assembly and post-processing technology expertise
- Parts optimization through Computer Aided Design

You can find more information on Solvay Product range by on Technyl.com and the link to the product finder and brochures at the following address:

<http://www.technyl.com/en/download/brochures/index.html>