

TECHNYL® A 218 V33 Natural is a polyamide 66, reinforced with 33% of glass fibre, heat stabilized, for injection moulding. This grade offers an excellent combination between thermal and mechanical properties.

GENERAL

Material Status	• Commercial: Active
Availability	• Latin America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight
Additive	• Heat Stabilizer
Key Benefits	• Good Flow • Heat Aging Resistance • Heat Stabilized (Inorganic) • Good Mold Release
Applications	• Bearing cages • Chain tensioners • Connectors • Gear wheels • Pulleys • Structural parts • White appliances
Certification/Compliance	• UL QMFZ2
RoHS Compliance	• RoHS Compliant
Colors Available	• Black • Natural Color
Forms	• Pellets
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-G33

PROPERTIES

Typical values of properties are for Natural grades

Physical	Dry	Conditioned	Unit	Test Method
Molding Shrinkage				ISO 294-4
Across Flow	1.1		%	
Flow	0.40		%	
Water Absorption				ISO 62
24 hr, 23°C	0.78		%	
Saturation, 23°C	5.5		%	
Equilibrium, 23°C, 50% RH	1.6		%	
Density	1.39		g/cm³	ISO 1183/A

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	11600	7800	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	205	145	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	3.0	5.0	%	ISO 527-2
Charpy Notched Impact Strength (23°C)	13	17	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength				
23°C	90	95	kJ/m²	ISO 179/1eU
23°C	85	20	kJ/m²	ISO 179/1fU
Notched Izod Impact (23°C)	80		J/m	ASTM D256

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				ISO 75-2/Af
1.8 MPa, Unannealed	250		°C	
Melting Temperature	262		°C	ISO 11357-3

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 substitutive 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

This product is not intended to be used for the following regulated market: food contact, drinking water, toys, cosmetics or medical devices.

This grade complies with ROHS Directive 2011/65/EU and 2015/863 as amended.

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
- Design simulation
- Processing through different technologies
- Assembly and post-processing technology expertise
- Parts optimization through Computer Aided Design

MULTIPOINT DATA

Isothermal Stress vs. Strain (ISO 11403-1)

