

TECHNYL®

TECHNYL® C 502XT NATURAL

TECHNICAL DATA SHEET

Revised: September, 2016

TECHNYL® C 502XT is an unreinforced polyamide 6, very high viscosity, for extrusion.

GENERAL

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe
Key Benefits	• High Viscosity
Applications	• Consumer and Industrial applications • Pipes
Certification/Compliance	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Colors Available	• Natural Color
Forms	• Pellets
Processing Method	• Extrusion
Resin ID (ISO 1043)	• PA6

PROPERTIES

Typical values of properties are for Natural grades

Physical	Dry	Conditioned	Unit	Test Method
Water Absorption (24 hr, 23°C)	1.4		%	ISO 62
Density	1.13		g/cm ³	ISO 1183/A
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	2800	900	MPa	ISO 527-2/1A
Tensile Stress (Yield, 23°C)	80	35	MPa	ISO 527-2/1A
Tensile Strain				ISO 527-2
Yield, 23°C	4.2	2.5	%	
Break, 23°C	160		%	
Charpy Unnotched Impact Strength (23°C)	No Break			ISO 179/1eU
Notched Izod Impact Strength (23°C)	7.0		kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature	222		°C	ISO 11357-3



Electrical	Dry	Conditioned Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+12 ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13 ohms·cm	IEC 60093
Electric Strength (2.00 mm)	22	18 kV/mm	IEC 60243-1
Relative Permittivity	3.40	3.90	IEC 60250
Comparative Tracking Index (Solution A)	600	V	IEC 60112

Extrusion	Dry Unit
Suggested Max Moisture	0.080 %
Cylinder Zone 1 Temp.	230 to 250 °C
Cylinder Zone 2 Temp.	235 to 255 °C
Cylinder Zone 3 Temp.	240 to 260 °C
Die Temperature	230 to 250 °C

Extrusion Notes

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.

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, MERCHANTABILITY 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.

Grades produced or imported in Europe comply with REACH directive 1907/2006/EC 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

You can find more information on Solvay Product range on our internet product finder at the following address: <http://www.technyl.com>

Notes

Typical properties: these are not to be construed as specifications.