

TECHNYL®

TECHNYL® A 208K BLACK 10N-L

TECHNICAL DATA SHEET

Revised: September, 2018

TECHNYL® A 208K Black 10N-L is a polyamide 66, Highly UV-resistance, toughness modified for injection moulding. This grade offers two main advantages: its good resilience and its excellent filling quality of moulds.

GENERAL

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Key Benefits	• F1 UL Classification • Fast Molding Cycle • Good Flow	• Heat Stabilized (Inorganic) • Good Mold Release • Good UV Resistance
Applications	• Cable ties • Clips & Fasteners	• Wiring & cables applications
Certification/Compliance	• EC 1907/2006 (REACH)	• UL QMFZ2
RoHS Compliance	• RoHS Compliant	
Colors Available	• Black	
Forms	• Pellets	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA66	

PROPERTIES

Typical values of properties are for Black grades

Physical	Dry	Conditioned	Unit	Test Method
Water Absorption (24 hr, 23°C)	1.2		%	ISO 62
Outdoor Suitability	f1			UL 746C
Density	1.14		g/cm³	ISO 1183/A
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Strength				
Break, 23°C	75		MPa	ASTM D638
Break, 23°C	85		MPa	ISO 527-2/1A
Tensile Elongation				
Break, 23°C	40		%	ASTM D638
Break, 23°C	20		%	ISO 527-2
Flexural Modulus				
23°C	3500		MPa	ASTM D790
23°C	2900		MPa	ISO 178
Flexural Strength (23°C)	110		MPa	ASTM D790 ISO 178

Mechanical	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	5.0		kJ/m²	ISO 179/1eA
Notched Izod Impact				
23°C	70		J/m	ASTM D256
23°C	4.0		kJ/m²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ASTM D648
0.45 MPa, Unannealed	211		°C	
1.8 MPa, Unannealed	73		°C	
Melting Temperature	262		°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength				IEC 60243-1
23°C, 0.800 mm	35		kV/mm	
23°C, 2.00 mm	22		kV/mm	
Relative Permittivity (23°C, 2.00 mm, 1 MHz)	3.20			IEC 60250
Dissipation Factor (1 MHz)	0.032			IEC 60250
Comparative Tracking Index (Solution A)	600	600 V		IEC 60112

PROCESSING

Injection	Dry	Unit
Drying Temperature	80	°C
Suggested Max Moisture	0.20	%
Rear Temperature	265 to 275	°C
Middle Temperature	270 to 280	°C
Front Temperature	280 to 285	°C
Mold Temperature	60 to 80	°C

Injection 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, dew point mini -20°C. Recommended time 2-4h

Injection Advice:

- For unfilled polyamides, Solvay recommends the use of high alloy steel with a low chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered.
- The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design

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.

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

Notes

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