

TECHNYL eXten[®] D 219CR V33 NATURAL

TECHNICAL DATA SHEET

Revised: August, 2018

TECHNYL eXten[®] D 219CR V33 Natural (XD 2131) is a grade based on polyamide blend of polyamide 6.10 and polyamide 66, reinforced with 33% of glass fiber, heat stabilized with organic stabilizers, for injection moulding.

GENERAL

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight	
Additive	• Heat Stabilizer	• Hydrolysis Resistant
Key Benefits	• High Chemical Resistance • Good Dimensional Stability • Good Flow • Very High Glycol Resistance • Heat Stabilized (Organic)	• Hydrolysis Resistant • Low Moisture Absorption • High Road Salt Resistance • Good Surface Finish • Weldable
Applications	• Automotive applications • Cooling circuit component • Expansion tanks	• Radiator end tanks • Thermostat housings
Certification/Compliance	• EC 1907/2006 (REACH)	
RoHS Compliance	• RoHS Compliant	
Colors Available	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	
Resin ID (ISO 1043)	• PA610+PA66-GF33	

PROPERTIES

Typical values of properties are for Natural grades

Physical	Dry	Conditioned	Unit	Test Method
Molding Shrinkage				ISO 294-4
Across Flow	1.0		%	
Flow	0.40		%	
Water Absorption				ISO 62
24 hr, 23°C	0.30		%	
Saturation, 23°C	3.6		%	
Equilibrium, 23°C, 50% RH	1.3		%	
Density	1.35		g/cm ³	ISO 1183/A
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	11000	8150	MPa	ISO 527-2/1A

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Strength				
Break, 23°C		135	MPa	ASTM D638
Break, 23°C	190	135	MPa	ISO 527-2/1A
Tensile Elongation				
Break, 23°C	3.1	5.4	%	ASTM D638
Break, 23°C	3.0	5.3	%	ISO 527-2
Flexural Modulus (23°C)	9900	7500	MPa	ISO 178
Flexural Stress (23°C)	285	225	MPa	ISO 178
Charpy Notched Impact Strength (23°C)	10	13	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	85	90	kJ/m ²	ISO 179/1eU
Notched Izod Impact Strength (23°C)	10	15	kJ/m ²	ISO 180
Unnotched Izod Impact (Area) (23°C)	100	100	kJ/m ²	ASTM D256
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	223		°C	ISO 75-2/Bf
1.8 MPa, Unannealed	215		°C	ISO 75-2/Af
Melting Temperature	220 to 260		°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, 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

MULTIPOINT DATA

Isothermal Stress vs. Strain (ISO 11403-1)

