



Technyl® eXten D 458P

PA610-I

Solvay Engineering Plastics

Product Texts

High viscosity unfilled polyamide PA6 10 for extrusion applications providing low and part warpage.Rheological properties dry / cond Unit Test Standard

ISO Data

Molding shrinkage, parallel	3.5 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	3.0 / *	%	ISO 294-4, 2577

Mechanical properties dry / cond Unit Test Standard

ISO Data

Tensile Modulus	800 / 550	MPa	ISO 527-1/-2
Stress at 50% strain	40 / 34	MPa	ISO 527-1/-2
Strain at break	>50 / >50	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	87 / 117	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	15 / 19	kJ/m ²	ISO 179/1eA

Thermal properties dry / cond Unit Test Standard

ISO Data

Melting temperature (10°C/min)	215 / *	°C	ISO 11357-1/-3
Thickness tested	1.6 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10

Other properties dry / cond Unit Test Standard

ISO Data

Water absorption	1.6 / *	%	Sim. to ISO 62
Humidity absorption	0.5 / *	%	Sim. to ISO 62
Density	1040 / -	kg/m ³	ISO 1183

Characteristics

Special Characteristics

High impact or impact modified

Other text information

Injection Molding

The material is supplied in airtight bags, ready to use. In the case that the virgin material has absorbedmoisture, it must be dried to a final moisture content less than 0,1% with a dehumidified air drying equipment at approximately 80°C.

Extrusion conditions

Feed zone °C 215-225°C
 Compression zone °C 225-235°C
 Front zone °C 225-235°C
 Die temperatures °C 230-240°C

Chemical Media Resistance

Acids

- Acetic Acid (5% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)

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Page: 1/2

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Alcohols

 Ethanol (23°C)

Hydrocarbons

 Toluene (23°C)

Ketones

 Acetone (23°C)

Mineral oils

 SAE 10W40 multigrade motor oil (23°C)

Standard Fuels

 Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)

Salt solutions

 Zinc Chloride solution (50% by mass) (23°C)

Other

 Hydrogen peroxide (23°C)
 Ethylene Glycol (50% by mass) in water (108°C)
 50% Oleic acid + 50% Olive Oil (23°C)
 Deionized water (90°C)
 Phenol solution (5% by mass) (23°C)