Technyl® eXten D 458P

PA610-I Solvay Engineering Plastics

Product Texts

High viscosity unfilled plasticized PA6.10 for extrusion applications providing low end 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/m²	ISO 179/1eU
Charpy impact strength, -30°C	N / N	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	87 / 117	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	15 / 19	kJ/m²	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/m³	ISO 1183

Characteristics

Special Characteristics

High impact or impact modified

Other text information

Injection Molding

The material is supplied in airtight bags, ready fro use. In the case that the virgin material has absorbed moisture, 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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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)