Technyl® C 52G4 MZ25

PA6-MF25 FR — Solvay Engineering Plastics

Product Texts

Flame retardant polyamide PA6 reinforced with mineral filler, for injection moulding. Enhanced processing behavior for thin wall parts.

This phosphorus and halogen free flame retardant grade is particularly suitable for equipment with robust glowwire resistance such as MCB housings.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	6400 / -	MPa	ISO 527-1/-2
Stress at break	75 / -	MPa	ISO 527-1/-2
Strain at break	3 / -	%	ISO 527-1/-2
Charpy impact strength (+23°C)	47 / -	kJ/m²	ISO 179/1eU
Charpy notched impact strength (+23°C)	3 / -	kJ/m²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
Melting temperature (10°C/min)	222 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	130 / *	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Oxygen index	31 / *	%	ISO 4589-1/-2

Electrical properties	dry / cond	Unit	Test Standard
ISO Data			
Comparative tracking index	525 / -	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
ISO Data			
Water absorption	1 / *	%	Sim. to ISO 62
Density	1370 / -	kg/m³	ISO 1183

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, mold temperature	80	°C	ISO 10724

Characteristics

Processing	Special Characteristics
Injection Molding	Flame retardant

Other text information

Injection Molding

The material is supplied in airtight bags, ready for use. In the case that the virgin material has absorbed moisture, it must be dried to a final moisture content of less than 0.2% with a dehumidified air drying equipment at approx 80°C.

Recommended moulding conditions :

Barrel temperatures :
- feed zone 220 - 230°C
-compre ssion zone 230 - 240°C
-front zone 245 - 255°C
Mould temperatures : 80°C

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Chemical Media Resistance

Acids

- Acetic Acid (5% by mass) (23°C)
- Citric Acid solution (10% by mass) (23°C)
- Lactic Acid (10% by mass) (23°C)
- Hydrochloric Acid (36% by mass) (23°C)
- Nitric Acid (40% by mass) (23°C)
- Sulfuric Acid (38% by mass) (23°C)
- Sulfuric Acid (5% by mass) (23°C)
- Chromic Acid solution (40% by mass) (23°C)

Bases

- Sodium Hydroxide solution (35% by mass) (23°C)
- Sodium Hydroxide solution (1% by mass) (23°C)
- Ammonium Hydroxide solution (10% by mass) (23°C)

Alcohols

- Isopropyl alcohol (23°C)
- Methanol (23°C)
- Ethanol (23°C)

Hydrocarbons

- n-Hexane (23°C)
- Toluene (23°C)
- iso-Octane (23°C)

Ketones

- Acetone (23°C)

Ethers

- Diethyl ether (23°C)

Mineral oils

- SAE 10W40 multigrade motor oil (23°C)

Standard Fuels

- Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23°C)
- Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23°C)

Salt solutions

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

Other

- Ethylene Glycol (50% by mass) in water (108°C)
- 50% Oleic acid + 50% Olive Oil (23°C)
- Water (23°C)
- Deionized water (90°C)