

**DESCRIPTION** Starflam PK0052E is a Halogen Free and Red Phosphorous, Free Flame Retardant, Mineral Filled, Polyamide 6 Injection Molding Resin (also known as PM3650Z222 or PA6 25E6 U9Z22)

PROPERTY (1)	UNIT	STANDARD	TYPICAL VALUE (1) Dry As Moulded
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### PHYSICAL

Density	g/cm <sup>3</sup>	ISO 1183	1.37
Mold Shrinkage, flow, 24 hrs (5)	%	ISO 294	0.4 - 0.7

### MECHANICAL

Flexural Modulus	MPa	ISO 178	5100
Flexural Stress	MPa	ISO 178	110
Tensile Modulus, 1 mm/min	MPa	ISO 527	6200
Tensile Strain, break	%	ISO 527	3
Tensile Stress, break	MPa	ISO 527	70

### IMPACT

Izod Impact, notched 80*10*4 +23°C	kJ/m <sup>2</sup>	ISO 180/1A	4
Izod Impact, unnotched 80*10*4 +23°C	kJ/m <sup>2</sup>	ISO 180/1U	30

### THERMAL

Ball Pressure Test, 125°C +/- 2°C		IEC 60695-10-2	PASS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	°C	ISO 75/Af	88
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	°C	ISO 75/Bf	185

### FLAME CHARACTERISTICS

Glow Wire Flammability Index 960°C, passes at	mm	IEC 60695-2-12 by E2P	1.6
UL Recognized, 94V-2 Flame Class Rating	mm	UL 94	0.8

Source RJF, last update 01-07-2010

(1) Typical values for natural color unless specified otherwise. Do not constitute a specification. Significant variations are possible for colors

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### ELECTRICAL

Comparative Tracking Index	V	IEC 60112	450
Volume Resistivity	Ohm-cm	IEC 60093	> 1E15

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PARAMETER	SETTING	UNIT
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.2	%
Mold Temperature	50 - 90	°C
Rear - Zone 1 Temperature	240 - 250	°C
Middle - Zone 2 Temperature	250 - 260	°C
Front - Zone 3 Temperature	250 - 270	°C
Melt Temperature	250 - 270	°C

**PROCESSING PARAMETERS:** see above typical molding conditions.

**DRYING:** is not essential when material is delivered in sealed bags with moisture content below 0.2%.

**BARRELS, SCREWS, MOULDS:** use wear resisting steel or alloy such as bimetallic cylinders, nitrided screws.

**USE OF REGRIND:** the properties of the component should be checked in order to ascertain the maximum acceptable level of regrind.

**SAFETY:** please refer to Material Safety Datasheet

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