

DESCRIPTION Starflam RF0057P is a Halogen Free and Red Phosphorous Free Flame Retardant, Glass Fiber Reinforced, Polyamide 66 / Polyamide 6 Injection Molding Resin (also known as RF1005Z270EM)

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

Density	g/cm ³	ISO 1183	1.39
Mold Shrinkage, flow (4mm thickness)	%	E2P Method	0.2

MECHANICAL

Flexural Modulus, 2 mm/min	MPa	ISO 178	8100
Flexural Stress, yield, 2 mm/min	MPa	ISO 178	195
Tensile Strain, break, 5 mm/min	%	ISO 527	2.4
Tensile Stress, yield, 5 mm/min	MPa	ISO 527	130

IMPACT

Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	kJ/m ²	ISO 179/1eU	54
Charpy 23°C, V-notch Edgew 80*10*4 sp=62mm	kJ/m ²	ISO 179/1eA	8
Izod Impact, notched 80*10*4 +23°C	kJ/m ²	ISO 180/1A	7
Izod Impact, unnotched 80*10*4 +23°C	kJ/m ²	ISO 180/1U	50

THERMAL

HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	°C	ISO 75/Af	214
Relative Temp Index, Elec	°C	UL 746B	140
Relative Temp Index, Mech w/impact	°C	UL 746B	105
Relative Temp Index, Mech w/o impact	°C	UL 746B	140

FLAME CHARACTERISTICS

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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FLAME CHARACTERISTICS

Glow Wire Flammability Index 960°C, passes at	mm	IEC 60695-2-12	1.5
UL Recognized, 94V-0 Flame Class Rating	mm	UL 94	0.8

ELECTRICAL

Comparative Tracking Index	V	IEC 60112	600
High Ampere Arc Ign, surface {PLC}	PLC Code	UL 746A	0
Hot Wire Ignition {PLC}	PLC Code	UL 746A	0

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PARAMETER	SETTING	UNIT
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.2	%
Mold Temperature	60 - 100	°C
Rear - Zone 1 Temperature	265 - 275	°C
Middle - Zone 2 Temperature	265 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Melt Temperature	270 - 280	°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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