

DESCRIPTION Starflam AFR200B is an Unfilled, Flame Retardant Polyamide 66 Injection Molding Resin

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

PHYSICAL

Density	g/cm ³	ISO 1183	1.35
Mold Shrinkage on Tensile Bar, flow	%	E2P Method	1 - 1.5
Water Absorption, (23°C/sat)	%	ISO 62	6.5

MECHANICAL

Flexural Modulus, 2 mm/min	MPa	ISO 178	2800
Flexural Stress, break, 2 mm/min	MPa	ISO 178	105
Hardness, Rockwell R		ISO 2039-2	120
Tensile Modulus, 1 mm/min	MPa	ISO 527	3000
Tensile Strain, break, 50 mm/min	%	ISO 527	6
Tensile Strain, yield, 50 mm/min	%	ISO 527	3.7
Tensile Stress, break, 50 mm/min	MPa	ISO 527	80
Tensile Stress, yield, 50 mm/min	MPa	ISO 527	80

IMPACT

Izod Impact, notched 80*10*4 +23°C	kJ/m ²	ISO 180/1A	5
Izod Impact, notched 80*10*4 -20°C	kJ/m ²	ISO 180/1A	4
Izod Impact, notched 80*10*4 -40°C	kJ/m ²	ISO 180/1A	3

THERMAL

Ball Pressure Test, 125°C +/- 2°C		IEC 60695-10-2	PASSES
CTE, 23°C to 60°C, flow	1/°C	ISO 11359-2	8.50E-05

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

Starflam, Staramide and Starpylen are registered trademarks of EUROSTAR Engineering Plastics

All information, recommendation or advice giving by Eurostar Engineering Plastics Company, or any of its subsidiaries, affiliates or authorized representatives, is given in good faith. Eurostar Engineering Plastics makes no warranty or guarantee, express or implied about the information provided. Each user of the products shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its own particular purpose. Because actual use of the products by the user is beyond the control of Eurostar Engineering Plastics, its subsidiaries and affiliates, such use is in the exclusive responsibility of the user. Eurostar Engineering Plastics cannot be held responsible respectively liable for any loss incurred through the use of the products. Information, recommendations and/or advice are neither made to infringe on any patents, nor to grant a license under any patent or intellectual property right of Eurostar Engineering Plastics or any of its subsidiaries or affiliated companies, nor to grant the right to file for any patent protection.

EUROSTAR Engineering Plastics, ZI - Rue de la Ferme Saint Ladre, BP2, F/95471 Fosses Cedex FRANCE,

Tel: + 33 1 34 47 47 00, Fax: + 33 1 34 47 47 18 - www.eurostar-ep.com

DESCRIPTION Starflam AFR200B is an Unfilled, Flame Retardant Polyamide 66 Injection Molding Resin

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

THERMAL

CTE, 23°C to 60°C, xflow	1/°C	ISO 11359-2	8.50E-05
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	°C	ISO 75/Ae	100
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	°C	ISO 75/Be	216
Relative Temp Index, Elec	°C	UL 746B	65
Relative Temp Index, Mech w/impact	°C	UL 746B	65
Relative Temp Index, Mech w/o impact	°C	UL 746B	65
Vicat Softening Temp, Rate B/120	°C	ISO 306	245

FLAME CHARACTERISTICS

Glow Wire Flammability Index 960°C, passes at	mm	IEC 60695-2-12	2
Oxygen Index (LOI)	%	ISO 4589	29
UL Recognized, 94V-0 Flame Class Rating	mm	UL 94	0.75

ELECTRICAL

Comparative Tracking Index	V	IEC 60112	350
Comparative Tracking Index, M	V	IEC 60112	250
Volume Resistivity	Ohm-cm	IEC 60093	1.00E+13

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

Starflam, Staramide and Starpylen are registered trademarks of EUROSTAR Engineering Plastics
All information, recommendation or advice giving by Eurostar Engineering Plastics Company, or any of its subsidiaries, affiliates or authorized representatives, is given in good faith. Eurostar Engineering Plastics makes no warranty or guarantee, express or implied about the information provided. Each user of the products shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its own particular purpose. Because actual use of the products by the user is beyond the control of Eurostar Engineering Plastics, its subsidiaries and affiliates, such use is in the exclusive responsibility of the user. Eurostar Engineering Plastics cannot be held responsible respectively liable for any loss incurred through the use of the products. Information, recommendations and/or advice are neither made to infringe on any patents, nor to grant a license under any patent or intellectual property right of Eurostar Engineering Plastics or any of its subsidiaries or affiliated companies, nor to grant the right to file for any patent protection.

EUROSTAR Engineering Plastics, ZI - Rue de la Ferme Saint Ladre, BP2, F/95471 Fosses Cedex FRANCE,
Tel: + 33 1 34 47 47 00, Fax: + 33 1 34 47 47 18 - www.eurostar-ep.com

DESCRIPTION Starflam AFR200B is an Unfilled, Flame Retardant Polyamide 66 Injection Molding Resin

PARAMETER	SETTING	UNIT
Drying Temperature	75 - 85	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.2	%
Mold Temperature	60 - 90	°C
Rear - Zone 1 Temperature	260 - 270	°C
Middle - Zone 2 Temperature	270 - 280	°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

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

Starflam, Staramide and Starpylen are registered trademarks of EUROSTAR Engineering Plastics

All information, recommendation or advice giving by Eurostar Engineering Plastics Company, or any of its subsidiaries, affiliates or authorized representatives, is given in good faith. Eurostar Engineering Plastics makes no warranty or guarantee, express or implied about the information provided. Each user of the products shall convince himself, through all available sources (including finished product testing in its appropriate environment) of the suitability of the products supplied for its own particular purpose. Because actual use of the products by the user is beyond the control of Eurostar Engineering Plastics, its subsidiaries and affiliates, such use is in the exclusive responsibility of the user. Eurostar Engineering Plastics cannot be held responsible respectively liable for any loss incurred through the use of the products. Information, recommendations and/or advice are neither made to infringe on any patents, nor to grant a license under any patent or intellectual property right of Eurostar Engineering Plastics or any of its subsidiaries or affiliated companies, nor to grant the right to file for any patent protection.

EUROSTAR Engineering Plastics, ZI - Rue de la Ferme Saint Ladre, BP2, F/95471 Fosses Cedex FRANCE,

Tel: + 33 1 34 47 47 00, Fax: + 33 1 34 47 47 18 - www.eurostar-ep.com