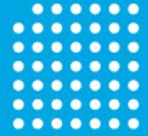


TECHNICAL DATA SHEET

**TECHNYL STAR AF 60SX V25 GY 2622**



TECHNYL AF 60SX V25 GY 2622 is a high flow polyamide 66 based on a non halogenated flame retardant system, reinforced with 25% of glass fiber, for injection molding. This product has been specifically designed to reduce exudation and/or blooming depending of the usage of the part. In addition, this non-halogenated flame retardant grade has a complete yellow card included full RTI down to 0.8mm, 5VA @ 1.5mm and f1 rating and is as well easy to mould. This product offers his best benefit for all Electrical protection devices and not limited too, such as well connectic and photovoltaic applications. The data provided are based on laboratory/experimental results. These data could be adjusted after industrial production.

**General**

Polymer type	PA66	
Certifications	UL listed product EN 45545	EC 1907/2006 (REACH)
Feature	halogen and red phosphorus free flame retardant electrical corrosion resistant low blooming very high flow	UL 94 V0 excellent surface finish low halogen content GWFI 960°C
Applications	electrical/electronic applications	
Colors available	natural	grey
Forms	pellets	
Processing technology	injection moulding	

**Product identification**

ISO 1043 abbreviation	PA66-GF25 FR(40)
ISO 16396 designation	PA66,GF25FR(40),M,S14-110

	Condition	Standard	Unit	Value
<b>Physical properties</b>				
Density		ISO 1183	g/cm <sup>3</sup>	1.38
Water absorption	24 hr, 23°C	ISO 62	%	0.7 - 0.9
Water absorption, saturation			%	4.5
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.36
Molding shrinkage, normal		ISO 294-4, 2577	%	1.2

	Condition	Standard	Unit	Value
<b>Mechanical properties</b>				<b>dam / cond.*</b>
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9200 / 6500
Stress at break		ISO 527-1/-2	MPa	105 / 70
Strain at break		ISO 527-1/-2	%	2 / 2.7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	8500 / -
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	160 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	30 / 30
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	4.5 / 5.5

\*: **conditioned according to ISO 1110**

	Condition	Standard	Unit	Value
<b>Thermal properties</b>				
Melting temperature, 10°C/min		ISO 11357-1	°C	263
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	242

	Condition	Standard	Unit	Value
<b>Burning behaviour</b>				
UL Yellow Card availability 1	<a href="#">Click here to have access to the UL Yellow Card availability 1 -&gt; QMFZ2.E44716</a>			
Flammability, 0.75 mm	0.75 mm	UL 94		V0
Flammability, 1.5 mm	1.5 mm	UL 94		5VA
Flammability, 3.0 mm	3.0 mm	UL 94		5VA
Glow-wire flammability index, GWFI, 0.75 mm	0.75 mm	IEC 60695-2-12	°C	960
Glow-wire flammability index, GWFI, 1.5 mm	1.5 mm	IEC 60695-2-12	°C	960
Glow-wire flammability index, GWFI, 3.0 mm			°C	960
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		< 100 mm/min

	Condition	Standard	Unit	Value
<b>Electrical properties</b>				
Comparative tracking index	Solution A	IEC 60112	V	600.0
CTI performance level category		Sol A		PLC 0
Dielectric strength	1 mm	IEC 60243-1	kV/mm	35.0

<b>Processing conditions</b>	
Drying temperature/time	80 °C
Suggested max moisture	0.12 %
Rear temperature	265 - 275 °C
Middle temperature	265 - 275 °C
Front temperature	270 - 280 °C
Recommended mould temperature	60 - 90 °C

### Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

### Injection advice

All reinforced, flame retardant compounds generate some level of abrasion/corrosion to the steel processing equipment. These issues may be magnified by using incorrect processing conditions (temperatures, residence time, moisture level ...) during the moulding process. Therefore, Domo recommends you adhere to the processing conditions detailed in this technical data sheet. For equipment that comes into contact with molten flame retardant compounds, Domo advises you to use a steel with high chromium and high carbon content (having a minimum concentration of 16% chromium) to prevent corrosion and abrasion. For the correct reference of steel associated to flame retardant compounds' processing, please refer to your equipment manufacturers. In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.