

## POLYAMIDE

JULY 2014 REV. 1 (61200)

# VENYL SG108 - 8689

### DESCRIPTION

**VENYL SG108 - 8689** is a 15 % glass fibre reinforced polyamide 6 intended for Injection moulding.

### APPLICATIONS

**VENYL SG108 - 8689** has been developed especially for very demanding applications in automotive industry and electrical parts.

Products requiring excellent combination between thermal and mechanical properties.

**VENYL SG108 - 8689** is available in both black (**VENYL SG108 - 8229**) and natural (**VENYL SG108**) but other colours can be provided on request.

### PROPRIETES

	Value <sup>1)</sup> SEC	COND	Unit	Test method
<b>PHYSICAL</b>				
Density	1,25		g/cm <sup>3</sup>	ISO 1183
Water absorption				
- at equilibrium 23°C/50% HR	~ 2,6		%	-
Shrinkage	0,4 - 0,8		%	-
<b>MECHANICAL</b>				
<i>TENSILE</i>				
Tensile strength maxi	95	70	MPa	ISO R 527
Elongation at break	3,5	4	%	ISO R 527
Tensile modulus	5500	4000	MPa	ISO R 527
<i>FLEXURAL</i>				
Flexural strength	190	115	MPa	ISO 178
Flexural modulus	4500	2800	MPa	ISO 178
<i>IMPACT</i>				
Charpy unnotched	25	35	KJ/m <sup>2</sup>	ISO 179
Charpy notched	6	10	KJ/m <sup>2</sup>	ISO 179
Izod notched	55	70	J/m	ISO R 180
Rockwell hardness L scale	101		-	ASTM D 785
<b>THERMAL</b>				
Melting point	220		°C	ISO 3146-C
Heat distortion temperature under load				
Under 1,85 MN/m <sup>2</sup>	180		°C	ISO R 75
Under 0,46 MN/m <sup>2</sup>	190		°C	ISO R 75
Flammability test				
UL 94 (1,6 mm)	HB		-	UL 94
Glow wire test (2 mm)	650		°C	IEC 695 - 2
<b>ELECTRICAL</b>				
Comparative tracking index (A)	600		V	IEC 112
Volume resistivity	10 <sup>13</sup>	10 <sup>10</sup>	Ω m	DIN 53482
Surface resistivity	10 <sup>12</sup>	10 <sup>10</sup>	Ω	DIN 53482

**SEC** : 0,3 % .

**COND** : 23°C/50 % HR

1) Data must not be used for specification work.

## FOOD CONTACT REGULATION

Please contact your AD majoris representative for more details.

## PROCESSING GUIDELINES

**VENYL SG108 - 8689** is easy to process with standard injection moulding machines. The following moulding parameters should be used as guidelines :

Type screw :	L/D = 15 à 20 ; 3 zones.
Injection nozzle :	
type :	open
thermal :	255 - 275°C
Barrel temperature :	
Zone 1 :	245 - 265°C.
Zone 2 :	250 - 270°C.
Zone 3 :	255 - 275°C.
Mould temperatures :	85 - 110°C.
Injection pressure :	85 - 110 MN/m <sup>2</sup> .
Injection speed :	very high.
Hold-on pressure	50 - 70 MN/m <sup>2</sup> .
Drying:	4 hours at 80°C

## STORAGE AND HANDLING

**VENYL SG108 - 8689** should be stored in dry conditions at temperatures below 60 °C and protected from UV-light.

Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

## SAFETY

**VENYL SG108 - 8689** is not classified as a dangerous preparation.

Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

## RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

A Safety Data Sheet is available on request. Please contact your AD majoris representative for more details on various aspects of safety, recovery and disposal of the product.

**The recommendations and data given are based on our experience to date, but no liability can be assumed in connection with their usage.**

