

5700

High performance vinylester SMC

Temporary Technical Data Sheet

Update: October 2019

Description :

5700 is a high mechanical performance SMC based on vinylester resin and reinforced with high ratio of chopped glass fibres (25 mm).
5700 is suitable for structural parts moulding.
5700 is black pigmented SMC
5700 has a good flow-ability

Moulding features (*) :

	Unit	Test method
Reactivity		ISO 12114
• Moulding T°C :	°C	145
• Thickness :	mm	3.0
• Max exothermic time:	s	34
Density	1,87	NFT 51063
Shrinkage	%	-0.025 NF EN 1842

(*)Compression moulding without flow / Average on 1 industrial production

Use recommendations :

Chromed tool is mandatory
High temperature between 140°C and 160°C.
Pressure between 80 and 120 bars.
Cure time 18 sec/mm at 145°C.

Application :

Structural parts.

COMPOSITION

Product nature	Unit	Ratio
Glass fibres content	%	45
Resins content	%	28
Fillers content	%	26
Other products content	%	1

APPEARANCE

	Unit	
Rolls :	kg	600 /1500
SMC width :	cm	150
Material support :	-	Coex
Surface weight :	kg/m ²	3.0
Colour		Black

MECHANICAL PROPERTIES WITHOUT FLOW AT 23°C

Moulding conditions		
Temperature	°C	145
Thickness	mm	30
Curing time	sec	90
Covering	%	100
Part size	mm	250X120
Layers		2

	Unit	Test method
Flexural test (*)		ISO 178
- Breaking stress	MPa	400
- Elastic modulus	MPa	17900
- Deviation at break	mm	3.2
Impact test (Charpy)(**)	kJ/m ²	127 ISO 179
Tensile test (***)		ISO 527
- Breaking stress	MPa	170
- Elastic modulus	MPa	16300
- Elongation at break	%	1.79

(*) Average on 1 industrial production

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MECHANICAL PROPERTIES WITH FLOW AT 23°C

Moulding conditions		
Temperature	°C	145/150
Thickness	mm	3.5
Curing time	sec	120
Covering	%	38
Part size	mm	400X800
Layers		7

	Unit	Perp/Para	Test method
Flexural test(*)			ISO 178
- Breaking stress	MPa	190/450	
- Elastic modulus	MPa	12300/19000	
- Deviation at break	mm	3.6/4.3	
Tensile test (**)			ISO 527
- Breaking stress	MPa	13100/19900	
- Elastic modulus	MPa	72/194	
- Elongation at break	%	0.9/1.3	

(*)

(**)

OTHER PROPERTIES

	Unit	Test method
HDT-A	°C	>230 ISO 75-2
Burning Speed	mm/min	<80 ISO3795/FMVS302
CLTE	10 ⁻⁶ K	10 - 30

Mixt Composites Recyclables

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Reactivity :

