

0618 SMC Low Profile Polyester

Technical Data Sheet

Update : January 2020

Description :

0618 is a not pigmented SMC reinforced with chopped glass fibers (25 mm).

0618 is a class A general purpose SMC with good mechanical behaviour.

Moulding features (*) :

	Unit	Test method
Reactivity		ISO 12114
• Moulding T°C :	°C	165
• Thickness :	mm	4,6
• Cure time :	s	41
Density		1,90 ISO 1183
Shrinkage	%	0,017 NF EN 1842

(*) Compression moulding without flow

Use recommendations :

High temperature from 160 to 165°C under high pressure 80 to 100 bars

Application :

Body part for car such hatchback: inner part

COMPOSITION

Product nature	Unit	Ratio
Glass fibres content	%	25
Resins content	%	23
Fillers content	%	49
Other products content	%	3

APPEARANCE

	Unit	
Rolls :	kg	1500
SMC width :	cm	148
Material support :	-	C0EX
Surface weighth :	kg/m ²	4,8
Colour		Not pigmented

MECHANICAL PROPERTIES WITHOUT FLOW AT 23°C

Moulding conditions		
Temperature	°C	145
Thickness	mm	4,7
Curing time	sec	70
Covering	%	100
Part size	mm	250X120
Layers		2

	Unit	Test method
Flexural test (*)		ISO 178
- Breaking stress	MPa	200
- Elastic modulus	MPa	13000
- Deviation at break	mm	5,3
Impact test (Charpy)(**)	kJ/m ²	72 ISO 179
Tensile test (***)		ISO 527
- Breaking stress	MPa	67
- Elastic modulus	MPa	12400
- Elongation at break	%	1,5

(*) Average on 6 production batches

(**) Average on 6 production batches

(***) Average on 4 laboratory batches

MECHANICAL PROPERTIES WITH FLOW AT 23°C

Moulding conditions		
Temperature	°C	160/165
Thickness	mm	3
Curing time	sec	65
Covering	%	36
Part size	mm	700X300
Layers		3

	Unit	Perp/Para	Test method
Flexural test(*)			ISO 178
- Breaking stress	MPa	130/250	
- Elastic modulus	MPa	11000/13500	
- Deviation at break	mm	3,5/3,5	
Tensile test (**)			ISO 527
- Breaking stress	MPa	50/90	
- Elastic modulus	MPa	13000/14500	
- Elongation at break	%	0,8/1,3	

(*) Average on 4 production batches

(**) Average on 4 laboratory batches

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OTHER PROPERTIES

	<i>Unit</i>		<i>Test method</i>
HDT-A	°C	>230	ISO 75-2
Burning Speed	mm/min	<80	ISO3795/FMVS302

Reactivity :

The reactivity datas below are given as a technical information.