

0688

SMC Low Shrink Polyester

Temporary Technical Data Sheet

Update: December 2019

Description :

SMC 0688 is a SMC reinforced with chopped glass fibres (25 mm).
SMC 0688 is a black pigmented SMC. 0688 is a SMC with a low VOC level.

Moulding features (*) :

	Unit		Test method
Reactivity			ISO 12114
• Moulding T°C :	°C	155	
• Thickness :	mm	4.4	
• Max exothermic time:	s	46	
Density		1,75	NFT 51063
Shrinkage	%	0.12	NF EN 1842

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

Use recommendations :

High temperature between 145°C and 160°C.
Pressure between 60 and 100 bars.
Cure time 15sec/mm at 155°C.
Cure time 20sec/mm at 150°C.

Application :

Pigmented inner part for truck and automotive applications

COMPOSITION

Product nature	Unit	Ratio
Glass fibres content	%	30
Resins content	%	31
Fillers content	%	36
Recycled Powder	%	0
Other products content	%	3

APPEARANCE

	Unit	
Rolls :	kg	1500
SMC width :	cm	148
Material support :	-	Coex
Surface weight :	kg/m ²	3.9
Colour		Deep Black (PSA HZD)

MECHANICAL PROPERTIES WITHOUT FLOW AT 23 °C

Moulding conditions		
Temperature	°C	150
Thickness	mm	4
Curing time	sec	46
Covering	%	100
Part size	mm	250X120
Layers		2

	Unit		Test method
Flexural test (*)			ISO 178
- Breaking stress	MPa	190	
- Elastic modulus	MPa	11000	
- Deviation at break	mm	5.5	
Impact test (Charpy)(**)	kJ/m ²	94	ISO 179
Tensile test (***)			ISO 527
- Breaking stress	MPa	79	
- Elastic modulus	MPa	11300	
- Elongation at break	%	1.7	

(*)Average on the first industrial production

(**)Average on the first industrial production

(***)Average on the first industrial production

MECHANICAL PROPERTIES WITH FLOW AT 23 °C

Moulding conditions		
Temperature	°C	157/162
Thickness	mm	4
Curing time	sec	90
Covering	%	38
Part size	mm	400X800
Layers		6

	Unit	Perp/Para	Test method
Flexural test(*)			ISO 178
- Breaking stress	MPa	140/230	
- Elastic modulus	MPa	9000/11600	
- Deviation at break	mm	4.3/4.3	
Tensile test (**)			ISO 527
- Breaking stress	MPa	59/111	
- Elastic modulus	MPa	10700/12800	
- Elongation at break	%	1.3/1.5	

(*)Average on the first industrial production

(**)Average on the first industrial production

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	

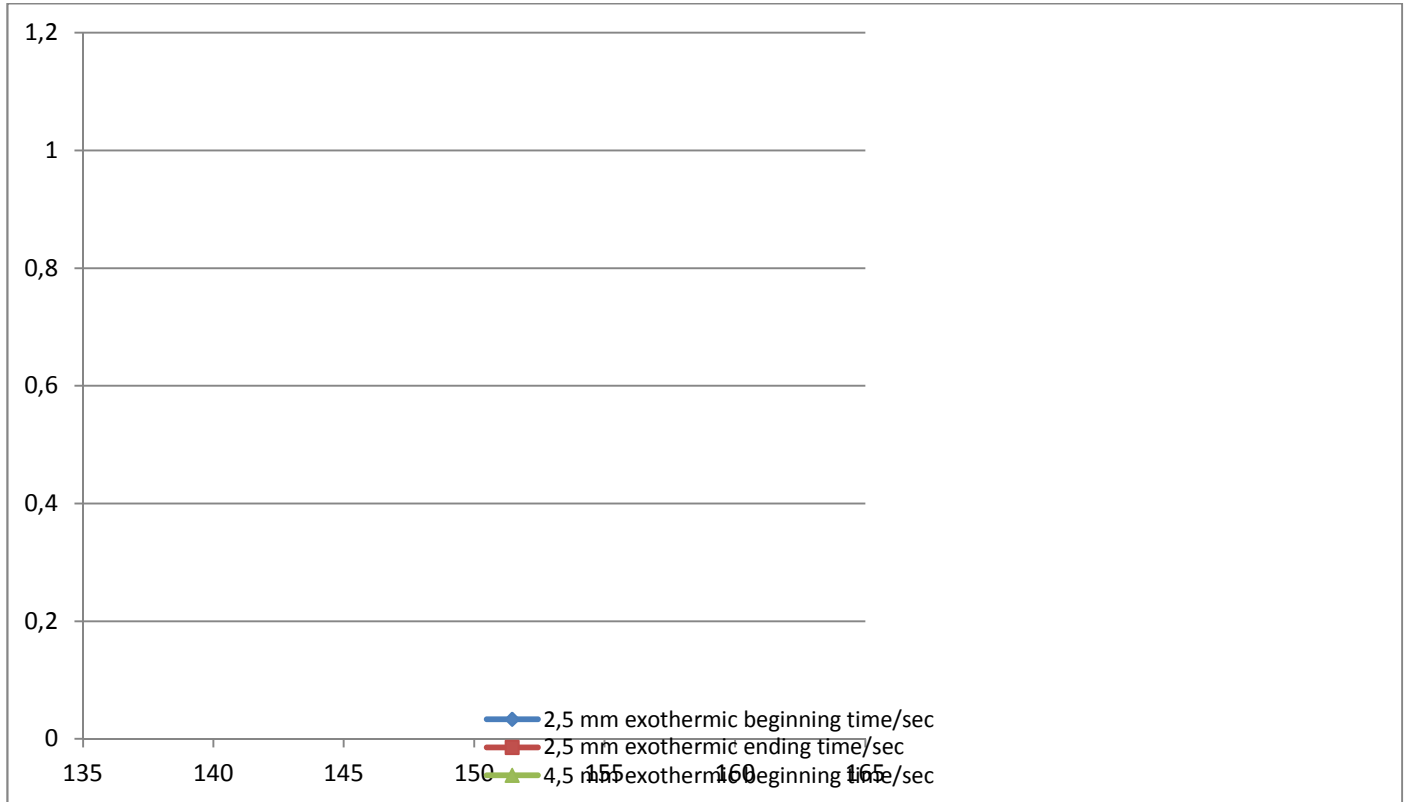
Mixt Composites Recyclables

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The reactivity datas below are given as a technical information.

MCR.O4.PR.01.FO.16 Fiche Technique

Reactivity :



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