

0689

SMC Low Shrink Polyester

Temporary Technical Data Sheet

Update: November 2019

Description :

0689 is a SMC reinforced with chopped glass fibres (25 mm).
0689 is a deep black pigmented SMC. 0689 should reach OEM VOC specification without post treatment (to be confirmed).

Moulding features (*) :

	Unit	Test method
Reactivity		ISO 12114
• Moulding T°C :	°C	150
• Thickness :	mm	4.0
• Max exothermic time:	s	51.5
Density		1,78 NFT 51063
Shrinkage	%	0.06 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 85 bars.
Cure time 20 sec/mm at 150°C.

Application :

Pigmented inner part for truck and automotive applications

COMPOSITION

Product nature	Unit	Ratio
Glass fibres content	%	30
Resins content	%	30
Fillers content	%	37
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

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	210
- Elastic modulus	MPa	11600
- Deviation at break	mm	5.0
Impact test (Charpy)(**)	kJ/m ²	80 ISO 179
Tensile test (***)		ISO 527
- Breaking stress	MPa	82
- Elastic modulus	MPa	10300
- 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	100/250	
- Elastic modulus	MPa	7800/12500	
- Deviation at break	mm	2.6/3.9	
Tensile test (**)			ISO 527
- Breaking stress	MPa	45/120	
- Elastic modulus	MPa	9000/13700	
- Elongation at break	%	1.3/1.3	

(*)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

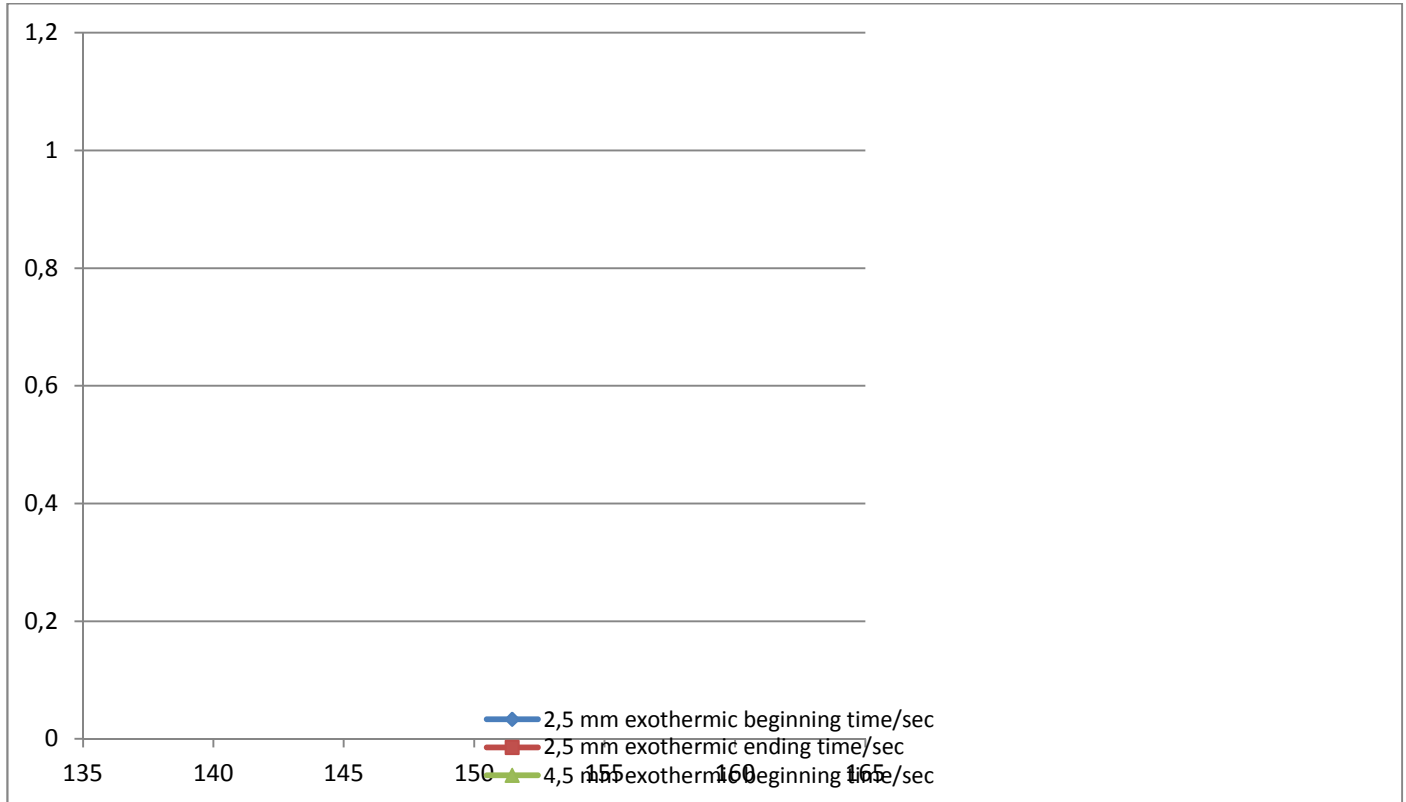
Mixt Composites Recyclables

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The reactivity datas below are given as a technical information.

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Reactivity :



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