

5217

SMC Low shrink Polyester

Temporary Technical Data Sheet

Update: sept 2019

Description :

5217 is a SMC reinforced with chopped glass fibres (25 mm).
5217 is a SMC with high mechanical properties and fire resistance behaviour.

Moulding features (*) :

	Unit	Test method
Reactivity		ISO 12114
• Moulding T°C :	°C	145
• Thickness :	mm	4.2
• Max exothermic time:	s	43
Density		1.8 NFT 51063
Shrinkage	%	0.04 NF EN 1842

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

Use recommendations :

High temperature between 140°C and 150°C.
Pressure between 65 and 100 bars.
Cure time 15 sec/mm at 145°C.

Application :

Battery pack.

COMPOSITION

Product nature	Unit	Ratio
Glass fibres content	%	25
Resins content	%	27
Fillers content	%	47
Recycled Powder	%	0
Other products content	%	1

APPEARANCE

	Unit	
Packaging :	kg	Roll or zig-zag box
SMC width :	cm	148
Material support :	-	Coex
Surface weight :	kg/m ²	4.5
Color	Natural	L=86.2 a=0.2 b=5.2

MECHANICAL PROPERTIES WITHOUT FLOW AT 23 °C

Moulding conditions		
Temperature	°C	146
Thickness	mm	4.2
Curing time	sec	90
Covering	%	100
Part size	mm	250X120
Layers		2

	Unit	Test method
Flexural test (*)		ISO 178
- Breaking stress	MPa	190
- Elastic modulus	MPa	10000
- Deviation at break	mm	5.4
Impact test (Charpy)(**)	kJ/m ²	68 ISO 179
Tensile test (***)		ISO 527
- Breaking stress	MPa	76
- Elastic modulus	MPa	12400
- Elongation at break	%	1.5

(*) Average on 1 pilot production

(**)Average on 1 pilot production

(***)Average on 1 pilot production

MECHANICAL PROPERTIES WITH FLOW AT 23 °C

Moulding conditions		
Temperature	°C	140/145
Thickness	mm	3.5
Curing time	sec	120
Covering	%	38
Part size	mm	700X400
Layers		7

	Unit	Perp/Para	Test method
Flexural test(*)			ISO 178
- Breaking stress	MPa	90/190	
- Elastic modulus	MPa	9700/10900	
- Deviation at break	mm	3.9/4.1	
Tensile test (**)			ISO 527
- Breaking stress	MPa	28/89	
- Elastic modulus	MPa	11500/14000	
- Elongation at break	%	0.7/1.2	

(*) Average the first pilot production

(**)Average the first pilot production

OTHER PROPERTIES

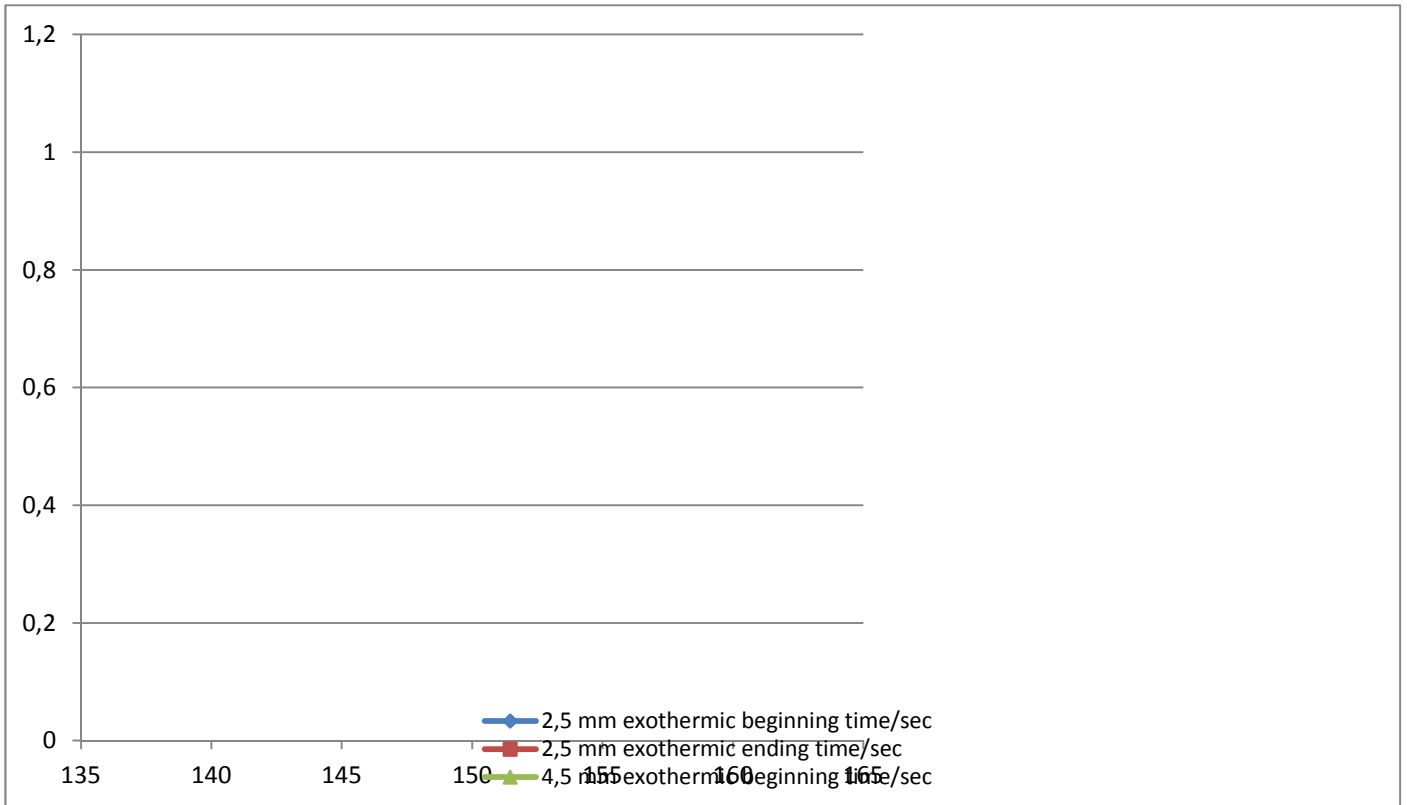
	Unit	Test method
HDT-A	°C	>230 ISO 75-2
Burning Speed	mm/min	<80 ISO3795/FMVS302
CLTE		10 - 30 NF EN60995-10-11
UL94	10 ⁻⁶ K	V0 à 2.5 mm
ILO	%	>32 ISO 4589-2
VOC	µg/g	In progress BMW GS97014-2

Mixt Composites Recyclables

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Reactivity :
The reactivity datas below are given as
a technical information.

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