OCV Reinforcements

PRODUCT INFORMATION

UNIFILO® FOR CLOSED MOULDS

U614, U801, U809, U812, U813, U814, U816, U817, U822, U850, U852, U854

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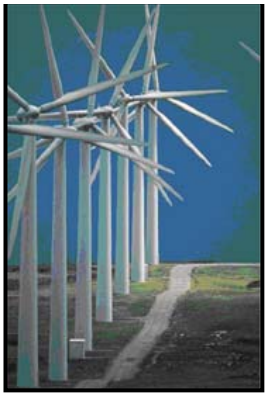

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PRODUCT DESCRIPTION

Unifilo® is an E-glass continuous filament mat consisting of randomly oriented strands in multiple layers held together with a suitable binder and with a silane coupling agent.

PRODUCT APPLICATION

- U801 can be used for:
  - parts produced by foaming polyurethane, at low density
  - complex parts moulded at low pressure
- U809 is especially suited for Polyurethane foam reinforcement and widely used in LNG carrier thermal insulation
- U614, U812, U813, U814, U816, U817, U822, can be used for:
  - parts moulded by RTM, L-RTM, infusion or wet compression with UP, VE, EP and PU resins
  - gypsum parts with improved fire resistance and mechanical properties
- U850, U852, U854 are suited especially for moulding with highly filled resins. Super performances met by infusion thanks to the core in 50 tex.

PRODUCT REFERENCE

Example	: U850 450 – 138
U	: Continuous strand mat (Unifilo®)
850	: Product classification code
450	: Nominal weight per unit area (g/m²)
138	: Roll width (cm)

FEATURES AND PRODUCT BENEFITS

• U614(*): closed molds mat	• Easy unrolling, cutting and handling
• U801: low binder content	• Good adaptability to complex shapes
• U809: very low binder content	• Even dispersion in PU matrix during foam expansion
• U812 to U822: rising binder content and rigidity	• Easy unrolling, cutting and handling
• U850, U852, U854: core made with higher strand tex	• Oustanding resin flow

(*) Advantex glass / Available only for NA Market

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TECHNICAL CHARACTERISTICS (nominal values)

Ref.	Sizing	Binder	Solubility in styrene	Linear Weight of basic strands (tex)	Loss On Ignition (%)	Moisture content (%)
				ISO 1889	ISO 1887	ISO 3344
U614	Silane	Polyester	Low	36	4,5	< 0.15
U801	Silane	Polyester	Low	25	1.6	< 0.15
U812	Silane	Polyester	Low	25	2.2	< 0.15
U822	Silane	Polyester	Low	25	2.0	< 0.15
U813	Silane	Polyester	Low	25	3.5	< 0.15
U814	Silane	Polyester	Low	25	4	< 0.15
U816	Silane	Polyester	Low	25	6	< 0.15
U850	Silane	Polyester	Low	25/50/25	6	< 0.15
U852	Silane	Polyester	Low	25/50/25	2.5	< 0.15
U854	Silane	Polyester	Low	25/50/25	4	< 0.15
U809	Silane	Polyester	Low	25	0.9	< 0.15
U817	Silane	Polyester	Low	25	7	< 0.15

VISUAL CHARACTERISTICS OR POSSIBLE DEFECTS

Type A: coarse strands
Type B: cluster of glass fibre
Type C: water spots
Type D: binder spots, dirt and foreign matters (diameter below 30 mm)
Type E: hole
Maximum number of defects allowed: each 100 lm Unifilo® roll section may contain at most 5 of the above listed defects.

PRODUCT AVAILABILITY (standard ref.)

Roll width (cm)	Standard weights (g/m²)	Approximate dimensions of a full* roll, 100 cm wide - by « full roll », is understood a roll having a guaranteed length of at least 90% of the value indicated above. - Minimum number of full rolls in each delivery: 60 %									
		Diameter (cm)	Nominal length (m)								
			U801	U812 U822	U813 U814	U816 U817	U850	U854	U852	U809	U614
100	100	55			600						
	150					360					
	225		235	250	250	260	270	250	260		
	300		190	200	205	210	220	205	210		
	450		125	130	135	140	155	135	140	125	
	600		80	85	90	90	100	90	95	85	
	900		65	70	75	75	85	75	75		
			Nominal weight (kg)								
100	100	55			60						
	150					54					
	225		52	57	57	59	61	57	59		
	300		57	60	62	63	66	62	63		
	450		56	59	61	63	70	61	63	56	
	600		48	51	54	57	63	54	57	51	
	900		59	63	78	68	77	78	68		

Available widths from 50 to 300 cm

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PACKAGING (standard ref.)

- Each roll of Unifilo® is wound up onto a cardboard tube of 0.7 kg/m with 103 mm internal diameter, then individually wrapped with a transparent protective film.
- Pallet type:
  - Rolls ≤ 205 cm width: standard pallet (vertical rolls 14 x 114cm)
  - Rolls > 205 cm width: wooden crate (horizontal rolls).
- Pallet protection:
  - Standard pallet = shrink-wrapped (cardboard base and cover)
  - Wooden crate = each roll packaged in a polyethylene bag.

LABELLING

- Each roll carries an information label with product reference.
- Each pallet carries also an information label with: product reference, gross and net weights, the number of rolls on the pallet and their net weight.

STORAGE

Unifilo® mat must be stored in its original packaging in a place with no humidity and heat.
The best conditions are temperatures between 15 and 35°C and a relative humidity level between 35 and 85%.
If the product is stored at lower temperature (below 15°C), we recommend to condition it inside the workshop for at least 24 hours prior using, to prevent condensation.
On site stacking of pallets is possible on (1/1) only. Please use a plywood plank between the two pallets to avoid damage the lower pallet.

OWENS CORNING
COMPOSITE MATERIALS, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OHIO 43659
1.800.GET.PINK™
www.owenscorning.com
www.ocvreinforcements.com
Contact:
Unifilo.ocvamericas@owenscorning.com

OWENS CORNING
FIBERGLAS, SPRL.
166, CHAUSSÉE DE LA HULPE
B-1170 BRUSSELS
BELGIUM
+32.2.674.82.99
Contact:
Unifilo.ocvemea@owenscorning.com

OWENS CORNING - OCV ASIA PACIFIC
SHANGHAI REGIONAL HEADQUARTERS
2F OLIVE LVO. MANSION
620 HUA SHAN ROAD
SHANGHAI 200040
CHINA
+86.21.62489922
Contract:
Unifilo.ocvap@owenscorning.com

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