

Name **Texlon System**



Product ID **Classification** 07 50 00.00 Thermal and Moisture Protection: Membrane Roofing

Website **www.vector-foiltec.com**

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**Description** The Texlon® System is based on the following principle: pneumatically stabilised foil elements are fixed to a sub-structure by means of a high-quality aluminium frame system. The system can consist of between two and five layers of ETFE foil (ethylene tetrafluoroethylene) depending on the building physics, static or design requirements and specifications. g-values and U-values are determined by the number of layers, the color and the type of coating. The thickness of the ETFE foils varies between 80 µm and 300 µm according to the requirements of the structural analysis. The individual layers are welded together at the edges and stabilised to approximately 220 Pa (220 N/m<sup>2</sup>) by means of a low-pressure air system. This HPD is based on a typical 3-layer foil system: Upper layer: 200 µm // Middle layer: 100 µm // Lower layer: 200 µm

Release Date 2015-07-20  
Expiry Date 2018-07-20  
HPD URL <http://www.vector-foiltec.com/texlon-etfe-system/sustainability/>

Self-declared  
 Second Party **Certifier**  
 Third Party **Certificate #**

## SUMMARY DISCLOSURE

The content of this product was assessed for health hazard warnings as required using Pharos

**Residuals Disclosure** **Full Disclosure of Intentional Ingredients**  Yes  No  
 Measured 100 ppm (ideal) **Full Disclosure of Known Hazards**  Yes  No  
 Measured 1000 ppm  
 Predicted by process chemistry **Disclosure Notes**  
 As per MSDS (1,000 & 10,000 ppm) Pharos  
 Not disclosed  
 Other

### Contents in Descending Order of Quantity

ALUMINUM , 1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with tetrafluoroethene , Polydimethylsiloxanes , SILICA, AMORPHOUS , CALCIUM STEARATE , MAGNESIUM , Silicon , IRON , Ethylene tetrafluoroethylene (ETFE) , CARBON BLACK , CALCIUM CARBONATE , TETRABUTYL ORTHOTITANATE , tetrakis(2-butoxyethyl) orthosilicate , LIMESTONE; CALCIUM CARBONATE , Octamethyltrisiloxane (L3) , ZINC , Unknown , Manganese , COPPER , Chromium , DECAMETHYLCYCLOPENTASILOXANE (D5) , NAPHTHALENE

**Hazards** **Highest concern GreenScreen score - List Translator Benchmark 1**  
 PBT (Persistent  Development  Neurotoxicity  Land toxicity  Multiple  
Bioaccumulative  Reproductive  Mammal  Physical hazard  Unknown  
Toxic)  Endocrine  Skin or Eye  Global warming  
 Cancer  Respiratory  Aquatic toxicity  Ozone depletion  
 Gene Mutation

**Total VOC Content**  
**Material (g/L)** N/A **Does the product contain exempt VOCs?**  N/A  Yes  No  
**Regulatory (g/L)** N/A **Are there VOC-free tints available?**  N/A  Yes  No

Notes

### Certifications + Compliance

**VOC Emissions** AgBB evaluation scheme (building products emissions) - 2015 **VOC Content** N/A



The HPD Standard is solely a declaration of product content and direct health hazards associated with exposure to its individual contents. It is not a full assessment of environmental impacts from the life cycle of this product. It is not an assessment of risks associated with actual use of the product. It does not address the potential health impacts of substances used or created during manufacture that do not appear in the final product as residuals, nor substances created during combustion or other degradation processes.

This Health Product Declaration was generated following the requirements of the noted Standard version and is valid for a total of three years after date of issue or three months after a substantive change of product contents occurs. Users should verify that this Health Product Declaration is compliant with the most current version of the HPD Standard. Accuracy of claims made in this Health Product Declaration is the sole responsibility of the listed manufacturer and certifier (if applicable). The HPD Collaborative does not warrant any claim made herein, explicit or implicit. The HPD Standard is an “open standard” developed and managed by the HPD Collaborative, a nonprofit organization. For more information, visit [hpdcollaborative.org](http://hpdcollaborative.org).

## CONTENT IN DESCENDING ORDER OF QUANTITY

All ingredients must be assessed for health warnings against Priority Hazard Lists, regardless of disclosure level.

Priority Hazard Lists and information on the GreenScreen Benchmarks can be found at [www.hpdcollaborative.org/hazardlists](http://www.hpdcollaborative.org/hazardlists).

**GS:** GreenScreen Benchmark; **RC:** Recycled Content, **PC:** Post Consumer, **PI:** Post Industrial (Pre-consumer), **BO:** Both; **Nano:** comprised of nanoscale particles or nanotechnology

Name	CAS RN	% weight	GS	RC	Nano	Role
<b>Hazard A</b>	<b>Warning A</b>					
<b>Hazard B</b>	<b>Warning B</b>					
<b>Hazard C</b>	<b>Warning C</b>					
<b>Hazard D</b>	<b>Warning D</b>					
<b>Hazard E</b>	<b>Warning E</b>					
<b>Notes</b>						
<b>ALUMINUM</b>	7429-90-5	65.71 - 77.71 %	LT-P1	U	U	Aluminium Extrusion for ETFE Cushion Frame
ENDOCRINE	TEDX: Potential Endocrine Disruptor					
RESPIRATORY	AOEC: Asthmagen (ARs) - sensitizer-induced - inhalable forms only					
FLAMMABLE	EU H-Statements: H228 Flammable solid					
REACTIVE	EU H-Statements: H261 In contact with water releases flammable gases					
Proportion of the Aluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with tetrafluoroethene</b>	25067-11-2	12 - 24.5 %	LT-U	N	N	ETFE Foil
None found	No warnings found on HPD Priority lists					
Actual listed CAS number is 74499-71. Information on VOC testing is provided in the NOTES section of this HPD						
<b>Polydimethylsiloxanes</b>	63148-62-9	3.48 - 9.54 %	LT-P1	U	N	Silicon Gasket
PBT	DSL: Persistent, Bioaccumulative and inherently Toxic (PBiT) to humans					
Proxy for generic polyorganosiloxanes						
<b>SILICA, AMORPHOUS</b>	7631-86-9	3.48 - 9.54 %	LT-1	U	N	Silicon Gasket
CANCER	NIOSH-C: Occupational carcinogen					

<b>CALCIUM STEARATE</b>	1592-23-0	0.31 - 0.37 %	LT-U	U	N	Polypropylene (Keder) Ropes
None found	No warnings found on HPD Priority lists					
<b>MAGNESIUM</b>	7439-95-4	0.23 - 0.47 %	LT-U	U	U	Aluminium Extrusion for ETFE Cushion Frame
FLAMMABLE	EU H-Statements: H250 Catches fire spontaneously if exposed to air					
REACTIVE	EU H-Statements: H260 In contact with water releases flammable gases which may ignite spontaneously					
Proportion of the Aluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>Silicon</b>	7440-21-3	0.2 - 0.47 %	LT-U	U	U	Aluminium Extrusion for ETFE Cushion Frame
None found	No warnings found on HPD Priority lists					
Proportion of the Aluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>IRON</b>	7439-89-6	0.07 - 0.23 %	LT-U	U	U	Aluminium Extrusion for ETFE Cushion Frame
None found	No warnings found on HPD Priority lists					
Proportion of the Aluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>Ethylene tetrafluoroethylene (ETFE)</b>	25038-71-5	0.03 - 0.04 %		BO	N	ETFE Valves
None found	No warnings found on HPD Priority lists					
<b>CARBON BLACK</b>	1333-86-4	0.01 %	LT-1	U	U	Dow Corning 795 Silicone Building Sealant for patches
CANCER	NIOSH-C: Occupational carcinogen (also in Prop 65, IARC, MAK)					
proportional mass content on Dow Corning 795 SGS - Black: 3,5 mg/m³						
<b>CALCIUM CARBONATE</b>	471-34-1	0.01 %	LT-U	U	U	Dow Corning 795 Silicone Building Sealant for patches
None found	No warnings found on HPD Priority lists					
proportional mass content on Dow Corning 795 SGS - Black: 10 mg/m³						
<b>TETRABUTYL ORTHOTITANATE</b>	5593-70-4	0.01 %	LT-P1	U	U	Dow Corning 1200 OS Primer for Silicone Seal Patches Custom Designs H.C.
MULTIPLE	Vw/wS: Class 2 Hazard to Waters					
proportional mass concentration on Dow Corning 1200 OS Primer: = 5 - 10 %						
<b>tetrakis(2-butoxyethyl) orthosilicate</b>	18765-38-3	0.01 %	LT-U	U	U	Dow Corning 1200 OS Primer for Silicone Seal Patches Custom Designs H.C.

None found	No warnings found on HPD Priority lists					
proportional mass concentration on Dow Corning 1200 OS Primer: 5 - 10 %						
<b>LIMESTONE; CALCIUM CARBONATE</b>	1317-65-3	0.01 %	LT-U	U	U	Dow Corning 795 Silicone Building Sealant for patches
None found	No warnings found on HPD Priority lists					
proportional mass content on Dow Corning 795 SGS - Black: 15 mg/m <sup>3</sup>						
<b>Octamethyltrisiloxane (L3)</b>	107-51-7	0.01 %	LT-P1	U	U	Dow Corning 1200 OS Primer for Silicone Seal Patches Custom Designs H.C.
PBT	DSL: Persistent, Bioaccumulative and inherently Toxic (PBiT) to aquatic organisms					
proportional mass concentration on 1200 OS Primer Clear: 70 - 90 %						
<b>ZINC</b>	7440-66-6	0 - 0.12 %	LT-P1	U	U	Aluminium Extrusion for ETFE Cushion Frame
ACUTE AQUATIC	EU H-Statements: H400 - Aquatic Acute 1 - Very toxic to aquatic life (also in EU R-Phrases)					
CHRON AQUATIC	EU H-Statements: H410 - Aquatic Chronic 1 - Very toxic to aquatic life with long lasting effects					
FLAMMABLE	EU H-Statements: H250 Catches fire spontaneously if exposed to air					
REACTIVE	EU H-Statements: H260 In contact with water releases flammable gases which may ignite spontaneously					
RESPIRATORY	AOEC: Asthmagen (ARs) - sensitizer-induced - inhalable forms only					
Proportion of the Alluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>Unknown</b>	Unknown	0 - 0.1 %		U	U	Dow Corning 123 Silicone Seal Custom Designs H.C.
Unknown	Not disclosed by supplier					
Not disclosed by supplier						
<b>Manganese</b>	7439-96-5	0 - 0.08 %	LT-P1	U	U	Aluminium Extrusion for ETFE Cushion Frame
ENDOCRINE	TEDX: Potential Endocrine Disruptor					
Proportion of the Alluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>COPPER</b>	7440-50-8	0 - 0.08 %	LT-P1	U	U	Aluminium Extrusion for ETFE Cushion Frame
None found	No warnings found on HPD Priority lists					
Proportion of the Alluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						
<b>Chromium</b>	7440-47-3	0 - 0.04 %	LT-U	U	U	Aluminium Extrusion for ETFE Cushion Frame
RESPIRATORY	AOEC: Asthmagen (ARs) - sensitizer-induced - inhalable forms only					
Proportion of the Alluminium Alloy EN-AW 6060. Mass range due to different system configurations. Pre- & Post-consumer recycling rate for Aluminium in Europe: 50%. Recycling rate in the building sector appr. 90%.						

<b>DECAMETHYLCYCLOPENTASILOXANE (D5)</b>	541-02-6	R	LT-P1		Feedstock, Polydimethylsiloxanes
PBT	OR P3: Priority Persistent Pollutant - Tier 1 (also in DSL, EU PBT)				
ENDOCRINE	TEDX: Potential Endocrine Disruptor				
<b>NAPHTHALENE</b>					
	91-20-3	R	LT-1		Feedstock, CARBON BLACK
PBT	NWMP Priority: Priority PBT (also in WA PBT, OSPAR)				
CANCER	NTP-RoC: Reasonably Anticipated to be Human Carcinogen (also in Prop 65, MAK, EU R-Phrases, EPA-C, IARC, EU H-Statements)				
ENDOCRINE	SIN: Equivalent concern, including endocrine disruption - Sin List 1.0 (also in TEDX)				
MAMMALIAN	EU R-Phrases: R22: Harmful if swallowed.				
ACUTE AQUATIC	EU H-Statements: H400 - Aquatic Acute 1 - Very toxic to aquatic life (also in EU R-Phrases)				
CHRON AQUATIC	EU H-Statements: H410 - Aquatic Chronic 1 - Very toxic to aquatic life with long lasting effects				
MULTIPLE	VwVwS: Class 3 Severe Hazard to Waters				

## CERTIFICATIONS AND COMPLIANCE

**Certifying Party** = First: Manufacturer's self-declaration; Second: Verification by trade association or other interested party; Third: Verification by independent certifier (ideal).

**Applicable facilities** = Manufacturing sites to which testing applies.

Type	Standard or Certification			Certifier or Laboratory
	Certifying Party	Issue Date	Expiry Date	Certificate URL
VOC Emissions	AgBB evaluation scheme (building products emissions) - 2015			Umwelt Bundesamt (UBA)
	1st party manufacturer claim	2009-12-02		<a href="https://google.healthymaterials.net/uploads/files/certifications/4256/1436955863.pdf">https://google.healthymaterials.net/uploads/files/certifications/4256/1436955863.pdf</a>
	Applies to all ETFE foil used in the Texlon system			
	The ETFE foil was tested for VOC emissions according to ISO 16000-3, 16000-06, and 16000-1. According to the independent laboratory results, emissions after one, three and ten days of storage show very low concentrations of the detected VOCs and SVOCs. Comparing the emission behaviour with the AgBB/DIBt thresholds, the sum concentrations for asked parameters were much lower than required. The ETFE fulfills the AgBB requirements completely. The break-off criteria allowed the test to be completed after 7 days rather than the standard 28 days. Also, the concentration of aldehydes were low. In addition, it can be said that the determined VOCs are harmless to health. Substances that are carcinogenic, mutagenic, or toxic to reproduction were not detected.			
VOC Content	N/A			

Recycled Content	Not tested			

LCA	Environmental Product Declaration (EPD)			UL Environment Inc.
	3rd party independent certification	2014-05-06	2019-05-05	<a href="http://productguide.ulenvironment.com/ProductDetail.aspx?productID=69076">productguide.ulenvironment.com/ProductDetail.aspx?productID=69076</a>
	all			

**ACCESSORY MATERIALS**

This section is for additional products required by warranty or recommended by the manufacturer for installation (such as adhesives, fasteners, or factory coatings) or for maintenance, cleaning, or operations. Refer to Health Product Declarations, published separately, for a complete view of these products.

Note: This declaration is not intended to address hazards of the installation process.

Required or Recommended Product	URL for Companion Health Product Declaration
<b>Condition when required or recommended and/or other notes</b>	
Various fasteners, air supply systems, etc.	
Accessory materials will depend on site installation requirements	

**NOTES**