

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                                       |
|--|--|-----------------|-------|----|------|--|
| Hazard A   | Warning A  |                 |       |    |      |  |
| Hazard B   | Warning B  |                 |       |    |      |  |
| Hazard C   | Warning C  |                 |       |    |      |  |
| Hazard D   | Warning D  |                 |       |    |      |  |
| Hazard E   | Warning E  |                 |       |    |      |  |
| Notes  |  |                 |       |    |      |  |
| <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 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>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**