# TEST REPORT

## Laboratory tests on an infill material for artificial turf system

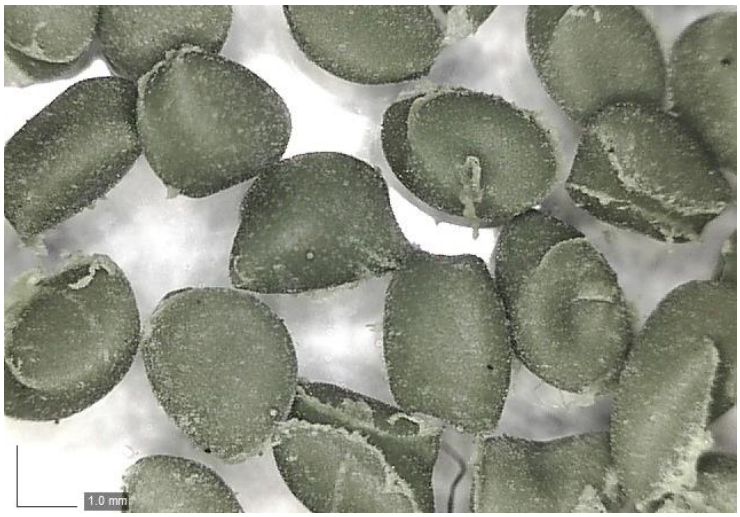
Tests performed according to the standards listed in the quote Q21413CAN

| | |
|---|---|
| **Report Number** | **R21413CAN-B1** |
| **Product** | **TTII PROMAX 37 TPE**<br>Target Technologies International |
| **Client** | **John B. Giraud,**<br>Target Technologies International Inc. 8535 Eastlake Drive, Burnaby BC V5A 4T7 |
| **Date** | **December 08th, 2021** |

## INFORMATION

| | | | | |
|---|---|---|---|---|
| **Product description** | Performance infill for synthetic turf system | | | |
| **Product name** | TTII Pro-Max 37 TPE | | | |
| **Product type** | TPE | | | |
| **Sample Number** | CAN002491 | | | |
| **Date of reception** | March 2017 | | | |
| **Date of tests** | November 2021 | | | |
| **Temperature** | MIN | 22°C | MAX | 24°C |
| **Humidity** | MIN | 49 % | MAX | 51 % |

*General View*




*Microscopic View*

## RESULTS

**Toxicological analysis of heavy metals by leachate – DIN 18035-7:**

| Parameters | Units | Test method | Results | Requirements | Pass/Fail |
|---|---|---|---|---|---|
| Lead (Pb) | mg/L | DIN 18035-7 | < 0.005 | ≤ 0.040 | Pass |
| Cadmium (Cd) | mg/L | DIN 18035-7 | < 0.001 | ≤ 0.005 | Pass |
| Total Chromium (Cr) | mg/L | DIN 18035-7 | < 0.002 | ≤ 0.050 | Pass |
| Tin (Sn) | mg/L | DIN 18035-7 | < 0.005 | ≤ 0.050 | Pass |
| Chromium (Cr VI) | mg/L | DIN 18035-7 | < 0.008 | ≤ 0.008 | Pass |
| Mercury (Hg) | µg/L | DIN 18035-7 | < 0.015 | ≤ 1 | Pass |
| Zinc (Zn1) | mg/L | DIN 18035-7 | < 0.005 | ≤ 0.50 | Pass |
| DOC | mg/L | DIN 18035-7 | 8.67 | ≤ 40 | Pass |
| EOX | mg/kg MS | DIN 18035-7 | 28 | ≤ 100 | Pass |

**Toxicological analysis of heavy metals – CAM 17:**

| Element | Units | Test method | Results | Requirements | Pass/Fail |
|---|---|---|---|---|---|
| Antimony | mg/kg | EPA 6020B | < 0.25 | < 500 | Pass |
| Arsenic | mg/kg | EPA 6020B | < 0.25 | < 500 | Pass |
| Barium | mg/kg | EPA 6020B | 2.82 | < 10 000 | Pass |
| Cadmium | mg/kg | EPA 6020B | < 0.25 | < 100 | Pass |
| Chromium | mg/kg | EPA 6020B | 0.455 | < 500 | Pass |
| Lead | mg/kg | EPA 6020B | 0.63 | < 1 000 | Pass |
| Selenium | mg/kg | EPA 6020B | < 0.25 | < 100 | Pass |
| Silver | mg/kg | EPA 6020B | < 0.25 | < 500 | Pass |
| Mercury | mg/kg | EPA 7471B | < 0.1 | < 20 | Pass |
| Berylium | mg/kg | EPA 6020B | < 0.25 | < 75 | Pass |
| Cobalt | mg/kg | EPA 6020B | < 0.25 | < 8 000 | Pass |
| Copper | mg/kg | EPA 6020B | 1.71 | < 2 500 | Pass |
| Zinc | mg/kg | EPA 6020B | 6.04 | < 5 000 | Pass |
| Molybdenum | mg/kg | EPA 6020B | < 0.25 | < 3 500 | Pass |
| Nickel | mg/kg | EPA 6020B | 502 | < 2 000 | Pass |
| Thallium | mg/kg | EPA 6020B | < 0.25 | < 700 | Pass |
| Vanadium | mg/kg | EPA 6020B | < 1.25 | < 2 400 | Pass |

**limits taken from the California Code Of Regulations - §66261.24*

**Toxicological analysis of polycyclic aromatic hydrocarbons (PAHs) – ASTM F3496:**

| Elements | Units | Method | Results | Requirements | Pass/Fail |
|---|---|---|---|---|---|
| Benzo (a) pyrene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Benzo (e) pyrene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Benzo (a) anthracene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Chrysene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Benzo (j+b) fluoranthene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Benzo (k) fluoranthene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| Dibenzo (a,h) anthracene | mg/Kg | ASTM F3496 | < 0.2 | - | - |
| HAP (sum) | mg/Kg | ASTM F3496 | < 1.4 | < 20 | Pass |

## REPORTED BY

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