

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-D2 - PLAYSAFE - Toxicology

Product TTII PLAYSAFE 65 COLOR-COATED EPDM
Target Technologies International

Client John B. Giraud,
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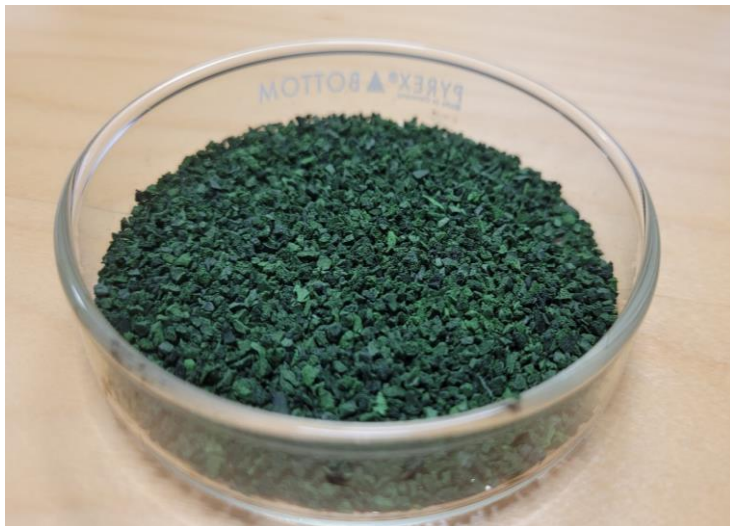
Date December 10th, 2021

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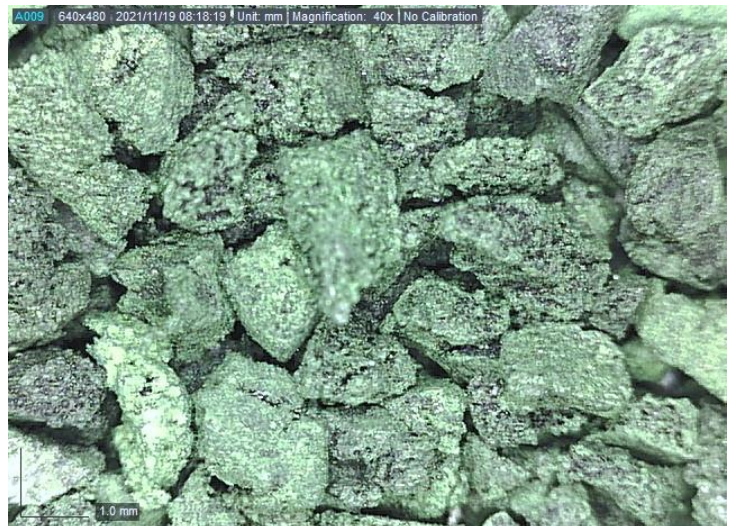
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INFORMATION

Product description	Performance infill for synthetic turf system			
Product name	TTII PLAYSAFE 65 COLOR-COATED EPDM			
Product type	EPDM			
Sample Number	CAN004242			
Date of reception	October 2021			
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	0.003	≤ 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	0.2	≤ 0.5	Pass
DOC	mg/L	DIN 18035-7	43.4	≤ 40	Pass
EOX	mg/kg MS	DIN 18035-7	25	≤ 100	Pass

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

Elements	Units	Method	Results	Requirements	Pass/Fail
Benzo (a) pyrene	mg/Kg	ASTM F3496	0.35	-	-
Benzo (e) pyrene	mg/Kg	ASTM F3496	0.81	-	-
Benzo (a) anthracene	mg/Kg	ASTM F3496	< 0.2	-	-
Chrysene	mg/Kg	ASTM F3496	< 0.2	-	-
Benzo (j+b) fluoranthene	mg/Kg	ASTM F3496	0.20	-	-
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	< 2.16	< 20	Pass

Toxicological analysis of phthalates:

Element	Units	Test method	Results	REACH Annex XVII entry 51	Pass/Fail
Dimethylphthalate	mg/Kg	DIN 18035-7	< 1	-	-
Diethylphthalate	mg/Kg	DIN 18035-7	< 1	-	-
Di-iso-butylphthalate	mg/Kg	DIN 18035-7	< 1	< 1000	Pass
Di-n-butylphthalate	mg/Kg	DIN 18035-7	< 1	< 1000	Pass
Bis-(2-methoxyethyl)phthalate	mg/Kg	DIN 18035-7	< 1	-	-
Benzyl-butylphthalate	mg/Kg	DIN 18035-7	< 1	< 1000	Pass
Bis-(2-ethylhexyl)phthalate	mg/Kg	DIN 18035-7	1.8	< 1000	Pass
Di-n-octylphthalate	mg/Kg	DIN 18035-7	< 1	-	-
DI-iso-nonylphthalate	mg/Kg	DIN 18035-7	< 1	-	-
Di-iso-decylphthalate	mg/Kg	DIN 18035-7	< 1	-	-
Phthalates – Total sample	mg/Kg	DIN 18035-7	< 10.8	-	-

REPORTED BY

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