

Test Report

No.: 70.431.23.16000.01

Date: 2023-10-30



Applicant:

WATERSAVERS TURF

Product Name:

Artificial Turf

Receipt Date of Sample:

2023-10-24

Date of Testing: Sample

2023-10-24 ~ 2023-10-30

Submitted: Test Result:

The sample(s) was (were) submitted by applicant and identified.
Refer to the data listed in following pages

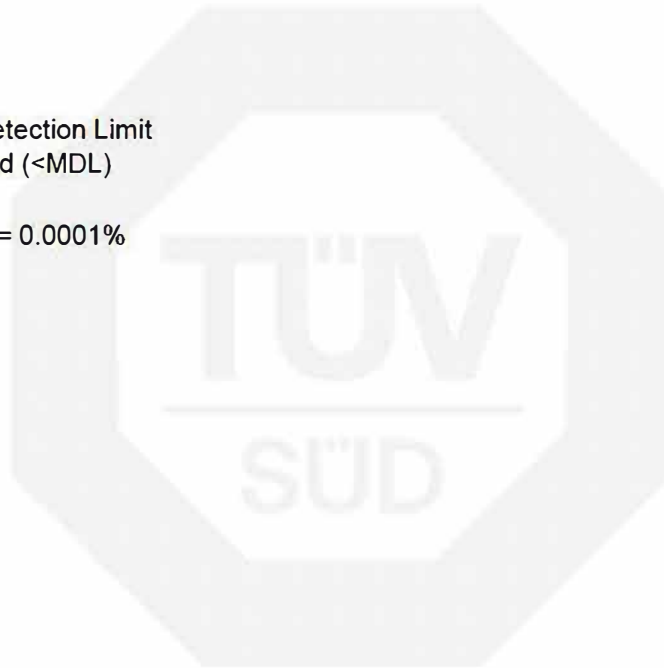
Test Item

1. Polycyclic Aromatic Hydrocarbons (15 PAHs)

Conclusion

Pass

- Remarks:
1. MDL = Method Detection Limit
 2. ND = Not Detected (<MDL)
 3. ≤ Less than
 4. 1 mg/kg = 1 ppm = 0.0001%



Laboratory:

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Description of Tested Subject:

Sample	Description	Photo
A	Artificial Turf	

T. No	Sample	Description
T1	001	Green soft plastic grass (straight)
T2	002	Light green soft plastic grass (straight)
T3	003	Green soft plastic grass (bent)
T4	004	Beige soft plastic grass (bent)
T5	005	Green/black soft plastic (grass base)
T6	006	Black coating (bottom)

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Test Result(s):

1. Polycyclic Aromatic Hydrocarbons (15 PAHs)

Test with reference to AfPS GS 2019:01, determination by GC-MS.

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					001	002
Naphthalene	91-20-3	mg/kg	0.1	2	ND	ND
Phenanthrene	85-01-8	mg/kg	0.1	-	ND	ND
Anthracene	120-12-7	mg/kg	0.1	-	ND	ND
Fluoranthene	206-44-0	mg/kg	0.1	-	ND	ND
Pyrene	129-00-0	mg/kg	0.1	-	ND	ND
Sum of 4 PAHs	-	mg/kg	0.1	10	ND	ND
Benzo[a]anthracene	56-55-3	mg/kg	0.1	0.5	ND	ND
Chrysene	218-01-9	mg/kg	0.1	0.5	ND	ND
Benzo[b]fluoranthene	205-99-2	mg/kg	0.1	0.5	ND	ND
Benzo[j]fluoranthene	205-82-3	mg/kg	0.1	0.5	ND	ND
Benzo[k]fluoranthene	207-08-9	mg/kg	0.1	0.5	ND	ND
Benzo[a]pyrene	50-32-8	mg/kg	0.1	0.5	ND	ND
Benzo[e]pyrene	192-97-2	mg/kg	0.1	0.5	ND	ND
Benzo[ghi]perylene	191-24-2	mg/kg	0.1	0.5	ND	ND
dibenzo[ah]anthracene	53-70-3	mg/kg	0.1	0.5	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.1	0.5	ND	ND
Sum of detected 15 PAHs	-	mg/kg	0.1	10	ND	ND
Category Conclusion					Category 2 Pass	Category 2 Pass

Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					003	004
Naphthalene	91-20-3	mg/kg	0.1	2	ND	ND
Phenanthrene	85-01-8	mg/kg	0.1	-	ND	ND
Anthracene	120-12-7	mg/kg	0.1	-	ND	ND
Fluoranthene	206-44-0	mg/kg	0.1	-	ND	ND
Pyrene	129-00-0	mg/kg	0.1	-	ND	ND
Sum of 4 PAHs	-	mg/kg	0.1	10	ND	ND
Benzo[a]anthracene	56-55-3	mg/kg	0.1	0.5	ND	ND
Chrysene	218-01-9	mg/kg	0.1	0.5	ND	ND
Benzo[b]fluoranthene	205-99-2	mg/kg	0.1	0.5	ND	ND
Benzo[j]fluoranthene	205-82-3	mg/kg	0.1	0.5	ND	ND
Benzo[k]fluoranthene	207-08-9	mg/kg	0.1	0.5	ND	ND
Benzo[a]pyrene	50-32-8	mg/kg	0.1	0.5	ND	ND
Benzo[e]pyrene	192-97-2	mg/kg	0.1	0.5	ND	ND
Benzo[ghi]perylene	191-24-2	mg/kg	0.1	0.5	ND	ND
dibenzo[ah]anthracene	53-70-3	mg/kg	0.1	0.5	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.1	0.5	ND	ND
Sum of detected 15 PAHs	-	mg/kg	0.1	10	ND	ND
Category Conclusion					Category 2 Pass	Category 2 Pass

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Parameter	CAS No.	Unit	MDL	Limit	Result(s)	
					005	006
Naphthalene	91-20-3	mg/kg	0.1	2	ND	ND
Phenanthrene	85-01-8	mg/kg	0.1	-	ND	ND
Anthracene	120-12-7	mg/kg	0.1	-	ND	ND
Fluoranthene	206-44-0	mg/kg	0.1	-	ND	ND
Pyrene	129-00-0	mg/kg	0.1	-	0.3	0.4
Sum of 4 PAHs	-	mg/kg	0.1	10	0.3	0.4
Benzo[a]anthracene	56-55-3	mg/kg	0.1	0.5	ND	ND
Chrysene	218-01-9	mg/kg	0.1	0.5	ND	ND
Benzo[b]fluoranthene	205-99-2	mg/kg	0.1	0.5	ND	ND
Benzo[j]fluoranthene	205-82-3	mg/kg	0.1	0.5	ND	ND
Benzo[k]fluoranthene	207-08-9	mg/kg	0.1	0.5	ND	ND
Benzo[a]pyrene	50-32-8	mg/kg	0.1	0.5	ND	ND
Benzo[e]pyrene	192-97-2	mg/kg	0.1	0.5	ND	ND
Benzo[ghi]perylene	191-24-2	mg/kg	0.1	0.5	ND	ND
dibenzo[ah]anthracene	53-70-3	mg/kg	0.1	0.5	ND	ND
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.1	0.5	ND	ND
Sum of detected 15 PAHs	-	mg/kg	0.1	10	0.3	0.4
Category					Category 2	Category 2
Conclusion					Pass	Pass

Remark: 1. Limit according to AfPS GS 2019:01PAK :

Parameter	Category 1	Category 2		Category 3	
		Used by children (mg/kg)	Other consumer products (mg/kg)	Used by children (mg/kg)	Other consumer products (mg/kg)
	Materials intended to be taken into the mouth, or materials in toys according to Directive 2009/48/EC or materials in articles intended for the use by children up to 3 years of age having long-term skin contact (more than 30s) within intended use	Materials that do not fall into category 1, with long-term skin contact (more than 30s) or repeated short-term skin contact within intended or foreseeable use		Materials that do neither fall into category 1 nor 2, with short-term skin contact (up to 30s) within foreseeable use	
Benzo[a]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[e]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[a]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[b]fluoroanthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[j]fluoroanthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[k]fluoroanthene	< 0.2	< 0.2	< 0.5	< 0.5	< 1

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Chrysene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Dibenzo[a,h]anthracene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Benzo[g,h,i]perylene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Indeno[1,2,3-c,d]pyrene	< 0.2	< 0.2	< 0.5	< 0.5	< 1
Phenanthrene, Pyrene, Anthracene, Fluoranthene	Sum < 1	Sum < 5	Sum < 10	Sum < 20	Sum < 50
Naphthalene	< 1	< 2		< 10	
Sum 15 PAH	< 1	< 5	< 10	< 20	< 50

-End of Test Report-



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