



TUV SUD America Inc.
Product Safety Services
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Surfacing Material Report - Least Favorable Impact Location – ASTM F1292-13

Client: Rubberecycle, LLC
 Manufacturer: Rubberecycle, LLC
 Manufacturing Location: Lakewood, NJ
 Phone: (732) 363-0600
 Commercial Name of Product: Genesis Turf
 Date of Manufacture: Unknown
 No. of samples submitted: 3 - 30in. X 30in. Systems

Project No.: 72120577-2
 Report Date: 9/28/2016
 Test Date: 9/28/2016
 Initial Test
 Follow up Test **Ref Job:**
 Sample Receipt Date: 9/23/2016
 Ambient Air Temperature: 22.1°C
 Humidity: 36.0%

Test Equipment:

Alpha Automation, Triax, TUV System 5: <input checked="" type="checkbox"/>	Environmental Chamber No.:	PLYP00069
Alpha Automation, Triax, TUV System 4: <input type="checkbox"/>	Calibration Due Date:	9/26/2017
Accelerometer ID: PLYP00144	Environmental Chamber No.:	PLYP00101
Accelerometer Calibration Date: 2/16/2016	Calibration Due Date:	9/26/2017

Unitary Sample Layer Description:

Total Thickness: 4.25in.
 Top Layer: 1.25in.
 Base Layer: 3.00in.

Determine Least Favorable Impact Location: The highest percentage (%), of maximum allowable value, based on g-max or HIC, as tested at the locations indicated on Page 2.

	<u>Impact Location:</u>	<u>Reference Temperature:</u>
Least Favorable Impact Location was determined at:	<u>Corner</u>	<u>23°C</u>

Comments:

- 1.) Samples tested in laboratory environment, overlying poured concrete floor.
- 2.) Calculate the average g-max and HIC scores by averaging results from the second and third impacts.
- 3.) After Least Favorable Impact Location is determined at 23°C, remaining testing will be completed at temperatures 49°C and -6°C at that location.
- 4.) System: 1.25in. pile Genesis Turf, overlying 3.00in. rubber mat filled with loose fill rubber mulch. Turf infilled with 2.5lbs. per square foot of sand (15.6lbs.). Total system depth/thickness of 4.25in.

The above described sample was tested at : 10 Ft.

The results reported herein reflect the performance of the above described samples at the time of testing and at the temperature(s) reported. The results are specific to the described samples. Samples of surfacing materials that do not closely match the described samples will perform differently. The following data sheet provides an accurate representation of the test results. Compliance with this Standard does not constitute product certification.

Sample in compliance with ASTM F1292-13 at the temperature and rating specified? Yes No

Signature: Timothy Fouchia Title: Project Coordinator Date: 9/28/2016

Reviewed by: [Signature] Title: Regional Manager Date: 9/28/2016

Client: **Rubberecycle, LLC**Project No.: **72120577-2**Manufacturer: **Rubberecycle, LLC**Test Date: **9/28/2016****Impact Location: Center of Sample**

Drop	Specified Impact Height (Ft.)	Reference Temperature -6°C, (21.2°F)				Reference Temperature 23°C, (73.4°F)				Reference Temperature 49°C, (120.2°F)				
		G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	
1	10				0.000	63	279	25.3	9.951				0.000	
2	10				0.000	52	237	25.3	9.951				0.000	
3	10				0.000	53	225	25.3	9.951				0.000	
Average		0	0			52.5	231			0	0			
Measured Surface Temperature		(-6°C)	Max. Change from reference + 5°C, (5°F)				23°C	Max. Change from reference ± 3°C, (±5°F)				49°C	Max. Change from reference -3°C, (-5°F)	
Sample Condition:		DRY						DRY						
Percentage (%) of maximum allowable values (g-max and HIC):						g-max:	26.3%	HIC:	23.1%					

Impact Location: Corner of Sample

Drop	Specified Impact Height (Ft.)	Reference Temperature -6°C, (21.2°F)				Reference Temperature 23°C, (73.4°F)				Reference Temperature 49°C, (120.2°F)				
		G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	
1	10	69	334	25.3	9.951	59	333	25.3	9.951	89	370	25.3	9.951	
2	10	59	279	25.3	9.951	56	248	25.3	9.951	104	383	25.3	9.951	
3	10	56	259	25.3	9.951	63	262	25.3	9.951	111	422	25.3	9.951	
Average		57.5	269			59.5	255			107.5	402.5			
Measured Surface Temperature		(-6°C)	Max. Change from reference + 5°C, (5°F)				23°C	Max. Change from reference ± 3°C, (±5°F)				49°C	Max. Change from reference -3°C, (-5°F)	
Sample Condition:		DRY						DRY						
Percentage (%) of maximum allowable values (g-max and HIC):						g-max:	29.8%	HIC:	25.5%					

Impact Location: Seam of Sample

Drop	Specified Impact Height (Ft.)	Reference Temperature -6°C, (21.2°F)				Reference Temperature 23°C, (73.4°F)				Reference Temperature 49°C, (120.2°F)				
		G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	G-Max	HIC	Velocity (ft/s)	Theoretical Drop Height (ft.)	
1	10				0.000	60	278	25.3	9.951				0.000	
2	10				0.000	55	225	25.3	9.951				0.000	
3	10				0.000	60	216	25.3	9.951				0.000	
Average		0	0			57.5	220.5			0	0			
Measured Surface Temperature		°C	Max. Change from reference + 5°C, (5°F)				23°C	Max. Change from reference ± 3°C, (±5°F)				°C	Max. Change from reference -3°C, (-5°F)	
Sample Condition:		DRY						DRY						
Percentage (%) of maximum allowable values (g-max and HIC):						g-max:	28.8%	HIC:	22.1%					

