



TEST REPORT

RUBBERCYCLE LLC
1985 Rutgers University Blvd.
Lakewood, NJ 08701

DTL REPORT NO	064021
REPORT DATE	01/09/02
RECEIVE DATE	01/02/02
CUSTOMER REF	

ATTN: Morris Hassan

SAMPLE DESCRIPTION

Rubbercycle LLC submitted approximately (10) cubic feet of material to be tested, identified as Playsafer Black. Testing was performed on 01/04/02.

WORK REQUESTED/TEST SPECIFICATIONS

To perform Head Impact testing to determine the maximum critical fall height on 6" of compacted Playsafer Black material.

ASTM F1292-99 Impact Attenuation of Surface Systems Under and Around Playground Equipment.

CONCLUSION

The maximum critical fall height of 6" of Playsafer Black material compacted at 3" and again at 6" was determined at 12'.

TEST RESULTS

Reported test parameters are generally specified as set points of testing equipment. All documents utilized in the generation of this report such as plots, graphs, traces, equipment, data sheets, calibration tolerances and uncertainties of equipment used are located within DTL job folders and are available upon request.

Procedure: Samples were tested to determine the maximum critical fall height of 6" of Playsafer Black material compacted at 3" and again at 6". Samples were tested at temperatures of -1°C, 23°C and 49°C. An impact test consists of three drops at the same impact site at each height. Calculating the average of the second and third drops.

Results: 6" Depth – 23° C Ambient Temperature

DROP #	HEIGHT	HIC	AVERAGE	PEAK G- MAX	AVERAGE
1	11'	695.41		113.68	
2	11'	775.46		123.63	
3	11'	784.67		127.86	
			780.06		125.74
1	12'	848.44		122.89	
2	12'	860.55		128.61	
3	12'	1085.74		150.75	
			973.01		139.68
1	13'	832.53		120.65	
2	13'	1185.50		155.47	
3	13'	1302.95		165.17	
			1244.22		160.32

Refer to Attachment A – 9 Pages.

TEST RESULTS CONTINUED

Results: 6" Depth – 49° C

DROP #	HEIGHT	HIC	AVERAGE	PEAK G- MAX	AVERAGE
1	11'	571.22		99.75	
2	11'	747.52		119.65	
3	11'	643.70		110.95	
			695.61		115.30
1	12'	576.62		99.75	
2	12'	827.64		124.63	
3	12'	998.03		143.53	
			912.83		134.08
1	13'	678.91		107.71	
2	13'	844.84		124.63	
3	13'	1163.23		152.74	
			1004.03		138.68

Refer to Attachment B – 9 Pages.

Results: 6" Depth – (-1°C)

DROP #	HEIGHT	HIC	AVERAGE	PEAK G- MAX	AVERAGE
1	11'	560.81		99.75	
2	11'	536.41		99.75	
3	11'	482.24		91.29	
			509.32		95.52
1	12'	475.63		88.81	
2	12'	557.77		99.75	
3	12'	654.21		109.45	
			605.99		104.60
1	13'	644.80		105.97	
2	13'	696.19		110.70	
3	13'	862.71		125.62	
			779.45		118.16

Refer to Attachment C – 9 Pages.

TEST RESULTS CONTINUED

Requirement: ASTM F1292-99 using the average of the last two of three drops, no value shall exceed 200 G-Max or 1000 HIC.

TEST EQUIPMENT

Detroit Testing Laboratory, Inc.'s calibration system meets the requirements of ISO 17025:1999.

- HIC Computer IV, KME, Model 300 Series, ID #08932, Calibrated Before Use
- Accelerometer, Piezotronic, Model 353 B17, ID #09349, Calibrated to 10/15/02
- ANSI "C" Head form, Per Designation F355-95
- Environmental Chamber, Thermotron, ID #EC046, Calibrated to 10/31/02
- Environmental Chamber, Thermotron, ID #EC017, Calibrated to 05/23/02

SAMPLE DISPOSITION

The sample will be retained for 30 days, then disposed of at the discretion of DTL unless otherwise instructed by Rubbercycle LLC.

Reported by:

DETROIT TESTING LABORATORY, INC.



Rob Allen
Test Technician 1



Keith Shelton
Certification Program Manager

RA/KS/cr

Enclosure: Terms and Conditions