



**TESTING SERVICES, INC.**  
 817 SHOWALTER AVE. • P.O. BOX 2041  
 DALTON, GEORGIA 30722-2041  
 PHONE: (706) 226-1400 • FAX: (706) 226-6118



<b>CLIENT:</b>	Rubber Resources	<b>REPORT NUMBER:</b>	44029
	9901 Ideal Lane	<b>LAB TEST NUMBER:</b>	2023-6379-02
	Hudson, FL 34667	<b>DATE:</b>	February 27, 2009

**Test Material**                      The following sample was submitted by the Client as: **Everlast Kids ADA Mulch @ 6" Depth**

**Sub Base:**                              Concrete

**Date of Receipt:**                      February 5, 2009

**Testing Period:**                        February 11-26, 2009

**Authorization:**                        Dale Hawker

**Test Requested:**                      The submitted sample was evaluated for Shock Absorbing Properties in Accordance with the procedures outlined in *ASTM F 1292-04, Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.*

**Test Results:**                          Continued on the following pages ...

Prepared and signed by:

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 Erle Miles, Jr. VP  
 Testing Services Inc



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Client: Rubber Resources  
 9901 Ideal Lane  
 Hudson, FL 34667

Results:

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Sample: Everlast Kids ADA Mulch at 6" Depth  
Tested Dimension: 18" X 18" X 6" (Compacted Depth)  
Test Procedure: ASTM F 1292-04  
Impact Location: Center of Compacted Mulch  
Missile: ANSI C Hemispherical Headform in Crown Position  
 Total Drop Assembly Weight 4.6kg (10 lbs)  
Test Equipment: Triax 2000 Surface Impactor  
 Date of Last Calibration: 2/19/09 by Alpha Automation  
Sample Pre-Condition: 50±10% RH, 72F±5F for a minimum of 24 hrs prior to testing  
 Compacted 1,004 ± 32 lbs for 1 minute (18" X 18") Container

<u>Temperature:</u>	<u>Maximum Drop Height That Gives a G<sub>max</sub> of 200 or Less and a HIC of 1000 or less</u>
Ambient, 72°F (23°C)	14'
Hot, 120°F (49°C)	14'
Cold, 25°F (-6°C)	14'
<b>Critical Fall Height (CFH):</b>	<b>14'</b>

Reference G<sub>max</sub> Curves Included



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 9901 Ideal Lane  
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Results

Temperature: 72°F (23°C)

Sample Condition: Dry

Drop #	Velocity ft/sec	Angle °	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	27.9	11	12'	12.10'	72	395
2	28.1	11	12'	12.27'	79	386
3	28.1	11	12'	12.27'	81	409
<b>Average</b>			<b>Drops 2,3</b>		<b>80</b>	<b>398</b>

Drop #	Velocity ft/sec	Angle °	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	29.2	14	13'	13.25'	85	429
2	29.2	15	13'	13.25'	86	446
3	29.1	13	13'	13.16'	90	493
<b>Average</b>			<b>Drops 2,3</b>		<b>88</b>	<b>470</b>

Drop #	Velocity ft/sec	Angle °	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	30.2	13	14'	14.17'	99	596
2	30.2	16	14'	14.17'	103	578
3	30.2	16	14'	14.17'	97	542
<b>Average</b>			<b>Drops 2,3</b>		<b>100</b>	<b>560</b>



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Client: Rubber Resources  
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Results

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Temperature: 120°F (49°C)

Sample Condition: Dry

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	28.1	4	12'	12.27'	86	470
2	28.2	13	12'	12.36'	90	491
3	28.1	1	12'	12.27'	81	391
<b>Average</b>			<b>Drops 2,3</b>		<b>86</b>	<b>441</b>

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	29.2	6	13'	13.25'	102	606
2	29.4	12	13'	13.43'	97	560
3	29.2	8	13'	13.25'	86	453
<b>Average</b>			<b>Drops 2,3</b>		<b>92</b>	<b>507</b>

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	30.2	14	14'	14.17'	94	522
2	30.1	14	14'	14.08'	95	498
3	30.2	11	14'	14.17'	104	658
<b>Average</b>			<b>Drops 2,3</b>		<b>100</b>	<b>578</b>



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Results

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Temperature: 25°F (-6°C)

Sample Condition: Frozen

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	27.8	3	12'	12.01'	84	421
2	27.8	0	12'	12.01'	86	431
3	27.8	5	12'	12.01'	93	500
<b>Average</b>			<b>Drops 2,3</b>		<b>90</b>	<b>466</b>

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	28.8	5	13'	12.89'	105	609
2	28.7	4	13'	12.80'	100	568
3	28.8	11	13'	12.89'	99	598
<b>Average</b>			<b>Drops 2,3</b>		<b>100</b>	<b>583</b>

Drop #	Velocity ft/sec	Angle°	Drop Ht. / Actual	Drop Ht. / Theoretical	Gmax	HIC
1	30.0	6	14'	13.99'	103	617
2	30.0	7	14'	13.99'	105	638
3	30.0	5	14'	13.99'	102	614
<b>Average</b>			<b>Drops 2,3</b>		<b>104</b>	<b>626</b>

END OF REPORT