

CLIENT: **MPL Company**
203 N. Edgerton
Fairland, IN 46126

Test Report No: TJ6201	Date: May 24, 2019
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SAMPLE ID: The two samples are identified as; **2-1/2" x 1/2" x 1/4" and 2-1/2" x 1/2" x 3/8"**

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special sampling conditions or sample preparation were observed by QAI.

DATE OF RECEIPT: Samples were received at QAI facilities on April 30, 2019.

TESTING PERIOD: May 20 - May 23, 2019


AUTHORIZATION: Signed Proposal 19SP041801, by Mark Laughlin of MPL Company, dated April 29, 2019. PO#QAI-04292019

TEST PROCEDURE: ASTM D-256-10 (2018), *Standard Test Method for Determining the Izod Pendulum Impact Resistance of Plastics.*

TEST RESULTS: Detailed test results are presented in the subsequent pages of this report.

Prepared By

**Signed for and on behalf of
QAI Laboratories, Inc.**


Rocky Hale
Materials Testing Technician

Project Manager

Conditioning: All specimens were stored in ambient laboratory conditions, $73.4 \pm 3.6^{\circ}\text{F}$ ($23 \pm 2^{\circ}\text{C}$) @ $50 \pm 5\%$ Relative Humidity for a minimum of 48 hours prior to testing.

Specimens: Specimens were prepared by the client and in compliance with ASTM D256, Figure 6 tolerances. QAI is not responsible for any variance from the specimen size, finish requirements, and rift direction detailed in the Standard, or any effect this may have on test results.

Procedure: Ten (10) specimens of each were tested for impact resistance in accordance with Section 10. Testing conducted in the standard laboratory atmosphere of 70°F and 50% relative humidity. Dimensional, breaking energy, impact resistance and the type of break can be seen below in Table 1 and Table 2.

Capacity of Pendulum: 2.0637 ft-lbf

Table 1 Sample ID: 2-1/2" x 1/2" x 1/4"

Specimen	Width, in	Breaking Energy, ft-lb	Impact Resistance, ft-lb/in	Type of Break
1	3.010	0.0856	0.0284	Clean Break
2	3.009	0.0727	0.0242	Clean Break
3	3.010	0.0736	0.0245	Clean Break
4	3.010	0.0758	0.0252	Clean Break
5	3.011	0.0761	0.0253	Clean Break
6	3.006	0.0699	0.0233	Clean Break
7	3.012	0.0580	0.0193	Clean Break
8	3.008	0.0644	0.0214	Clean Break
9	3.001	0.0620	0.0206	Clean Break
10	3.008	0.0798	0.0265	Clean Break
Average	--	0.072	0.024	--
Std. Dev.	--	--	0.002784	--

Table 2 Sample ID: 2-1/2" x 1/2" x 3/8"

Specimen	Width, in	Breaking Energy, ft-lb	Impact Resistance, ft-lb/in	Type of Break
1	3.042	0.0810	0.0266	Clean Break
2	3.033	0.0656	0.0216	Clean Break
3	3.030	0.0845	0.0279	Clean Break
4	3.033	0.0898	0.0296	Clean Break
5	3.033	0.0730	0.0241	Clean Break
6	3.036	0.0776	0.0256	Clean Break
7	3.036	0.0798	0.0263	Clean Break
8	3.033	0.0714	0.0236	Clean Break
9	3.043	0.0863	0.0284	Clean Break
10	3.032	0.0810	0.0267	Clean Break
Average	--	0.079	0.026	--
Std. Dev.	--	--	0.002407	--

**** END OF TEST REPORT ****

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