

TEST REPORT

REPORT NO : 2014PC0204

PAGE NO : 1 OF 8

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Applicant : Marklon Industries Sdn. Bhd.
No. 23, Jalan Tiaj 2/1
Taman Industri Alam Jaya
42300 Bandar Puncak Alam
Selangor Darul Ehsan

Manufacturer : - same as above -

Product : Polycarbonate Sheet; Brand: Marklon Polyglass;
Model: MK95 Clear Plane: 6 mm

Reference Standard : Refer to Page 2

Description of Sample : 10 cut pieces with size of 300 mm (length) x 300 mm (width) x
6 mm (thickness)

Date Received of Complete Application : 1 April 2014

Job No. : J20141460197

Description of Test Results : The test results of the submitted test sample are described in
Pages 3 and 4 of this test report

Issued date : 18 April 2014

Approved Signatory:

(Siti Rohana Ahmad)
Testing Executive



(Dr Ahmad Fuaad Md. Yusuf)
Head
Plastics and Composite Materials Section
Testing Services Department

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Test Methods:

1. ISO 62 – 2008: Plastics – Determination of Water Absorption.
2. ISO 75-2 – 2004: Plastics – Determination of Temperature of Deflection Under Load – Part 2: Plastics and Ebonite.
3. ISO 75-1 – 2004: Plastics – Determination of Temperature of Deflection Under Load – Part 1: General Test Method.
4. ISO 178 – 2010: Plastics – Determination of Flexural Properties.
5. ISO 527-2 – 1993: Plastics – Determination of Tensile Properties - Part 2: Test Conditions for Moulding and Extrusion Plastics.
6. ISO 868 – 2003: Plastics and Ebonite – Determination of Indentation Hardness by Means of a Durometer (Shore Hardness).
7. ISO 1183-1 – 2004: Plastics – Methods for Determining the Density of Non-Cellular Plastics – Part 1: Immersion Method, Liquid Pyknometer Method and Titration Method.

Sample preparation:

The test specimens were cut into required size using Manual Milling and Electronic Cutting techniques.



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Result:**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

No.	Test	Result	Test Method
1	Hardness, Shore D	78	ISO 868 Durometer type: Type D Penetration time: 15 seconds Average specimen thickness: 5.88 mm

Note: SAMM Accredited



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Result (Continued):**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

No.	Test	Result	Test Method
2	Flexural Strength, MPa	71.2	ISO 178
3	Flexural Modulus, MPa	2,090	Method A Test speed: 2 mm/minute Support span: 94 mm Number of specimen tested: 5 Date of test: 16 April 2014

Note: SAMM Accredited



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Result (Continued):**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

No.	Test	Results	Test Method
4	*Tensile Strength, MPa	65.8	ISO 527-2 Specimen type: Type 1B of ISO 527-2 Test speed: 50 mm/minute Number of specimen tested: 5 Date of test: 16 April 2014
5	Elongation at Break, %	5.7	
6	Tensile Modulus, MPa	2,490	ISO 527-2 Specimen type: Type 1B of ISO 527-2 Test speed: 1 mm/minute Number of specimen tested: 5 Date of test: 16 April 2014

Note: *SAMM Accredited



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Result (Continued):**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

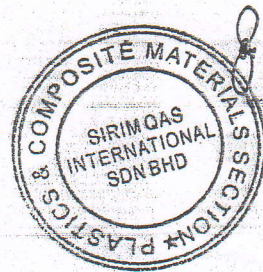
No.	Test	Result	Test Method
7	Density, kg/m ³	1200	ISO 1183-1 Method A – Immersion Method Immersion liquid: Water Test temperature: 22.0°C



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Result (Continued):**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

No.	Test	Result	Test Method
8	Heat Deflection Temperature, °C	135	ISO 75-2 Method A Stress: 1.80 MPa Edgewise position Support span: 100 mm Heating rate: 120°C/hour Standard deflection: 0.32 mm



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Result (Continued):**Polycarbonate Sheet; Brand: Marklon Polyglass; Model: MK95 Clear Plane: 6 mm**

No.	Test	Result	Test Method
9	Water Absorption, %	0.08	ISO 62 Method 1 24 hours immersion at 23°C Date of test: 8 April 2014

