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# Test Reports



**綜合試驗有限公司**  
**SOILS & MATERIALS ENGINEERING CO., LTD.**

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A CIGIS GROUP COMPANY

**Test Report**

**on Tensile Strength of Unreinforced and Reinforced Plastics**

Test method: ASTM D 3039-95a

Report No.: 11LM101101  
Page: 1 of 5  
Date Issued: 22 Nov 2011

Our Job No.: 11LM101101 Your ref./W.O. No.: -

**Details supplied by Client**

Contract No. WSD-09(W)  
Project title: Alum Tank Spray Fiber-Glass  
Project location: Yau Kam Tau Water Treatment Works  
Client: WSD  
Contractor: Pacific Products Ltd.  
Description of sample: A Spray of Fiber-Glass Sample Sheet (thickness 3-mm, 5-mm & 7-mm)

**Laboratory test results**

Date received: 11 Oct 2011 Date tested: 22 Nov 2011  
Condition received: Dry Compression machine no.: ST-0142  
Support span, L (mm): - Crosshead rate (mm/min): 5.00

Sample identification no.		Dimensions (mm)			Maximum Load (KN)	Tensile Strength (MPa)	Remarks
Client	Lab	Length	Width	Thickness			
-	1	198	26.0	3.0	5.81	74	-
-	2	212	27.5	5.0	11.46	83	-
-	3	210	26.5	7.0	16.67	90	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Average: 83  
Standard Deviation: 7.7

**Remarks:**

1. Test results relate to sample as tested only.

Checked by: 

Date: 22 Nov 2011

Approved by: 

Date: 22 Nov 2011



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**Test Report**

**on Flexural Strength of Unreinforced and Reinforced Plastics**

Test method: ASTM D 790-07

Report No.: 11LM101101

Page: 3 of 5

Date Issued: 22 Nov 2011

Our Job No.: 11LM101101

Your ref./W.O. No.: \_\_\_\_\_

**Details supplied by Client**

Contract No. WSD-09(W)  
Project title: Alum Tank Spray Fiber-Glass  
Project location: Yau Kam Tau Water Treatment Works  
Client: WSD  
Contractor: Pacific Products Ltd.  
Description of sample: A Spray of Fiber-Glass Sample Sheet (thickness 5-mm)

**Laboratory test results**


Date received: 11 Oct 2011 Date tested: 22 Nov 2011  
Condition received: Dry Compression machine no.: ST-0142  
Support span, L (mm): 160.0 Crosshead rate (mm/min): 2.00

Sample identification no.		Dimensions (mm)			Maximum Load (N)	Deflection at max. load (mm)	Flexural strength (MPa)	Slope of tangent to load-deform curve, m	Modulus of elasticity (GPa)
Client	Lab	Length	Width	Thickness					
-	1	211.5	27.5	5.0	489.4	14.50	177	23.0	6.84
-	2	-	-	-	-	-	-	-	-
-	3	-	-	-	-	-	-	-	-
-	4	-	-	-	-	-	-	-	-
-	5	-	-	-	-	-	-	-	-

**Remarks:**

1. Test results relate to sample as tested only.

Checked by:   
Date: 22 Nov 2011

Approved by:   
Date: 22 Nov 2011



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**Test Report**

**on Flexural Strength of Unreinforced and Reinforced Plastics**

Test method: ASTM D 790-07

Report No.: 11LM101101

Page: 4 of 5

Date Issued: 22 Nov 2011

Our Job No.: 11LM101101

Your ref./W.O. No.: -

**Details supplied by Client**

Contract No. WSD-09(W)

Project title: Alum Tank Spray Fiber-Glass

Project location: Yau Kam Tau Water Treatment Works

Client: WSD

Contractor: Pacific Products Ltd.

Description of sample: A Spray of Fiber-Glass Sample Sheet (thickness 7-mm)

**Laboratory test results**

Date received: 11 Oct 2011

Date tested: 22 Nov 2011

Condition received: Dry

Compression machine no.: ST-0142

Support span, L (mm): 180.0

Crosshead rate (mm/min): 2.00

Sample identification no.		Dimensions (mm)			Maximum Load (N)	Deflection at max. load (mm)	Flexural strength (MPa)	Slope of tangent to load-deform curve, m	Modulus of elasticity (GPa)
Client	Lab	Length	Width	Thickness					
-	1	210.0	27.3	7.0	847.2	16.50	176	45.2	7.03
-	2	-	-	-	-	-	-	-	-
-	3	-	-	-	-	-	-	-	-
-	4	-	-	-	-	-	-	-	-
-	5	-	-	-	-	-	-	-	-

**Remarks:**

1. Test results relate to sample as tested only.

Checked by:

Date: 22 Nov 2011

Approved by:

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**Test Report**

**on Compressive Strength of Unreinforced and Reinforced Plastics**

Test method: In house method

Report No.: 11LM101101

Page: 5 of 5

Date Issued: 22 Nov 2011

Our Job No.: 11LM101101

Your ref./W.O. No.: -

**Details supplied by Client**

Contract No. WSD-09(W)

Project title: Alum Tank Spray Fiber-Glass

Project location: Yau Kam Tau Water Treatment Works

Client: WSD

Contractor: Pacific Products Ltd.

Description of sample: A Spray of Fiber-Glass Sample Sheet (thickness 3-mm, 5-mm & 7-mm)

**Laboratory test results**

Date received: 11 Oct 2011

Date tested: 22 Nov 2011

Condition received: Dry

Compression machine no.: CE-0052

Support span, L (mm): -

Crosshead rate (kN/sec): 5.00

Sample identification no.		Dimensions (mm)			Maximum Load (kN)	Compressive Strength (MPa)	Density (kg/m <sup>3</sup> )
Client	Lab	Length	Width	Thickness			
-	1	100	26.0	3.0	1000	385	1255
-	2	100	27.5	5.0	1000	364	1389
-	3	100	26.5	7.0	1000	377	1380
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

Average: 375

Standard Deviation: 10.7

**Remarks:**

1. Test results relate to sample as tested only.
2. Test stopped at 1000kN, actual strength of specimens may higher than the reported value.

Checked by:

Date: 22 Nov 2011

Approved by:

Date: 22 Nov 2011