

# FUGRO TECHNICAL SERVICES LIMITED

Fugro Development Centre,  
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# MaterialLab

Report No.: 165404CN160622

Page 1 of 1



## TEST REPORT ON MIXING OF EPOXY

### Information Supplied by Client

Client: **Infrascan (HK) Ltd.**

Client Address: **Unit 7, 12/F., Paramount Building, 12 Ka Yip Street, Chai Wan, H.K.**

Project: **Material Testing**

Client's Ref.: **PA110**

Main Contract No.: --

Works Order No.: --

Serial No.: --

Sample Description: Type : **Huntsman Araldite Epoxy**

Source : --

Batch No. : --

### Laboratory Information

Lab Batch ID.: **CN160622/1**

Date Received: **17-Nov-2016**

Date of Mixing: **25-Nov-2016**

Sample Location: **Concrete Lab. of MaterialLab Ltd.**

Ambient Temperature: **22 °C**

Relative Humidity: **55 %**

Time of Start of Mixing: **16:00**

Mixing Time: **2 min.**

Time of Completion of Mixing: **16:02**

Test Method: **Ref. to HKHA/MTS (2008/2010) Specification Part D Clause 2.1.20**

**Ref. to HKHA/MTS (2014/2016) Specification Part D Clause 2.1.20**

### Test Results

Mixing Materials Description	Quantity
<b>Araldite AY133</b>	<b>2 kg</b>
<b>Hardener HY133LP</b>	<b>0.8 kg</b>
--	--
--	--

Remarks: --

Checked by : 

Approved Signatory : 

Chan Chi San (Engineer - Concrete)

Date : **05 DEC 2016**

\*\* End of Report \*\*

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# MaterialLab

Report No.: 165404CN160622(1)

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## TEST REPORT ON COMPRESSIVE STRENGTH TEST OF EPOXY CUBES

### Information Supplied by Client

Client: **Infrascan (HK) Ltd.**  
Client Address: **Unit 7, 12/F., Paramount Building, 12 Ka Yip Street, Chai Wan, H.K.**  
Project: **Material Testing**  
Contract No.: --  
Client ref.: **PA110**  
Serial No.: --  
Works Instruction No.: --  
Sample Description - Type : **Huntsman Araldite Epoxy**  
Source : --  
Batch No. : --  
Specimen No. : --

### Laboratory Information

Laboratory batch ID.: **CN160622/1**  
Date Received of Raw Materials: **17/11/2016**  
Date Cast: **25/11/2016**  
Date Tested: **02/12/2016**  
Age at Test: **7 days**  
Method of Compaction: **By Hand**  
Sample Location: **Concrete Laboratory of MaterialLab**  
Nominal Size of Specimens: **50 x 50 x 50 mm**  
Ambient Conditions - Preparation of the Specimens: **22 °C, 55 % RH**  
Testing of the Specimens: **20 °C, 60 % RH**  
Curing Conditions: **27±2°C, 55±5%RH**  
Test Method: **BS 6319 : Part 2 : 1983**

### Test Results

Laboratory Specimen I.D.	Client Specimen I.D.	Loading area (mm <sup>2</sup> )	Mass (g)	Max. Load (kN)	Compressive Strength (N/mm <sup>2</sup> )
CN160622/1A	---	2500	142.8	271.5	109
CN160622/1B	---	2500	142.8	271.4	109
CN160622/1C	---	2500	140.1	268.4	107
Arithmetic Mean Compressive Strength					108

Remark : --

Checked by:  Date: **05 DEC 2016** Approved Signatory:  Date: **05 DEC 2016**  
Chan Chi San (Engineer - Concrete)

\*\* End of Report \*\*

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# MaterialLab

Report No. : 165404CN160622(2)

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## TEST REPORT ON BOND STRENGTH OF EPOXY

### Information Supplied by Client

Client : Infrascan (HK) Ltd.

Client Address : Unit 7, 12/F., Paramount Building, 12 Ka Yip Street, Chai Wan, H.K.

Project : Material Testing

Client's Ref. : PA110

Sample Description - Type : Huntsman Araldite Epoxy

Source : --

Batch No. : --

Works Instruction No. : --

### Laboratory Information

Lab Batch ID : CN160622/1

Date Received : 17-Nov-2016

Date Cast : 25-Nov-2016

Date Tested : 02-Dec-2016

Age at Test : 7 days

Location of Sampling : Concrete Laboratory of MaterialLab

Ambient Condition During Preparation : 22 °C, 55 %RH



Curing Regime : 27 °C, 55 %RH

Test Method : Ref. to HKHA/MTS (2008/2010) Specification Part D Clause 2.1.14

### Test Results

Lab Specimen ID	Mass of Specimen (g)	Dimensions of Central Portion (mm)		Maximum Load (N)	Bond Strength (N/mm <sup>2</sup> )	Failure Mode		
		Width	Thickness			Area % of Failure Occurred at		
						Tested Mortar	Interface	Parent Mortar
CN160622/2A	109.9	25.5	25.4	2610	4.0	0	70	30
CN160622/2B	113.8	26.5	26.0	2715	3.9	0	60	40
CN160622/2C	107.9	26.7	26.0	2563	3.7	0	80	20
				Mean	3.9			

Remark : --

Checked by :  Approved Signatory :  Date : 05 DEC 2016  
Chan Chi San (Engineer - Concrete)

\*\* End of Report \*\*

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# MaterialLab

Report No. : 165404CN160622(3)

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## TEST REPORT ON TENSILE STRENGTH OF EPOXY

### Information Supplied by Client

Client : Infracan (HK) Ltd.

Client Address : Unit 7, 12/F., Paramount Building, 12 Ka Yip Street, Chai Wan, H.K.

Project : Material Testing

Client's Ref. : PA110

Sample Description :- Type : Huntsman Araldite Epoxy  
Source : --  
Batch No. : --

Works Instruction no. : --

### Laboratory Information

Lab Batch ID : CN160622/1

Date Received : 17-Nov-2016

Date Cast : 25-Nov-2016

Date Tested : 02-Dec-2016

Age at Test : 7 days

Location of Sampling : Concrete Laboratory of MaterialLab

Ambient Condition During Preparation : 22 °C, 55 % RH

Ambient Temperature During Testing : 20 °C, 60 % RH

Curing Regime : 27°C, 55% RH

Test Method : BS 6319 : Part 7 : 1985

### Test Result

Laboratory Specimen ID	Mass of Specimen (g)	Dimensions of Portion (mm) (WxT)		Maximum Load (N)	Tensile Strength (N/mm <sup>2</sup> )
		W	T		
CN160622/3A	70.6	25.4	25.4	16158	25.1
CN160622/3B	73.6	25.9	25.8	18458	27.7
CN160622/3C	72.0	26.0	25.1	19000	29.2
Mean					27.3

Remark : --

Checked by : 

Approved Signatory : 

Date : 05 DEC 2016

Chan Chi San (Engineer - Concrete)

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# MaterialLab

Report No. : 165404CN160622(4)

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Client's Ref. : PA110



## TEST REPORT ON FLEXURAL STRENGTH OF EPOXY

Client : Infracan (HK) Ltd.

Client Address : Unit 7, 12/F., Paramount Building, 12 Ka Yip Street, Chai Wan, H.K.

Project : Material Testing

Location : --

W/I No. : --

Sample Description : - Type : Huntsman Araldite Epoxy

Source : --

Batch No. : --

Batch ID : CN160622/1

Nominal Dimension of Specimen : 25 x 25 x 100 mm

Method of Compaction : By hand

Curing Regime : 27 ± 2 °C, 55% RH

Location of Sampling : Concrete Laboratory of MaterialLab

Date Received : 17-Nov-2016

Date Cast : 25-Nov-2016

Date Tested : 02-Dec-2016

Age at Test : 7 days

Test Method : BS 6319 : Part 3 : 1983

### Test Result

Specimen Identification	Dimensions of Failure Area (mm)	Mass of Specimen (g)	Maximum Load (N)	Flexural Strength (N/mm <sup>2</sup> )
CN160622/4A	25.0 x 25.2	73.0	14654	103.8
CN160622/4B	25.0 x 25.2	71.9	13130	93.0
CN160622/4C	24.8 x 25.2	71.2	13105	93.6
			Mean	96.8

Remark : --

Checked by :  Approved Signatory :  Date : 05 DEC 2016

Chan Chi San (Engineer - Concrete)

\*\* End of Report \*\*