



TEST REPORT 1920533/01-OYC

Date 15 NOV 2019

Singapore Test Lab Pte Ltd, 10B Enterprise Road, Singapore 629828, Tel: +65 6353 6393, Fax: +65 6353 6395

SUBJECT:

Testing of uPVC pipes

TESTED FOR:

Aliaxis Singapore Pte Ltd
15A Tuas Ave 18, #03-01,
Singapore 638905

Attn: Mr Steven Eu

SAMPLE RECEIVED DATE:

11 Nov 2019

TEST DATE:

12 Nov 2019

DESCRIPTION OF SAMPLE:

One lot of uPVC Pipe of size 155mm Ø was received. The descriptions are as follow:

Size	Markings
150mm Ø	SNOW SS141: 2013 BS 3506 150MM UPVC CLASS PN9 (CLASS C) PIPE



The results reported herein have been performed in accordance with the laboratory's terms of accreditation under the Singapore Accreditation Council – Singapore Laboratory Accreditation Scheme.
Cert No: LA-2018-0695-G

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METHOD OF TEST:

SS 141: 2013 - Specification for unplasticised PVC pipe for cold water services and industrial uses

TEST CONDUCTED:

1. Measurement of dimensional
2. Softening point
3. Heat reversion
4. Hydrostatic pressure
5. Impact strength
6. Tensile
7. Opacity

TEST RESULTS:

Table 1 – Dimensional Measurements

Sample Reference & Sizes	Results	SS 141: 2013 Requirements PN 9 (Class C)
	155mm Ø	155mm Ø
Mean outside diameter (mm)	168.3	168.0 min. 168.5 max.
Thickness individual value (mm)	6.9	6.6 min.
Thickness individual value (mm)	7.5	7.6 max.
Thickness average value (mm)	7.3	7.5 max.

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TEST RESULTS (CONT'D):

Table 2 – Softening Point Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Softening temperature °C	83	≥ 80

Table 3- Heat Reversion Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Heat reversion, (%) (Hot air oven)	3	5 max.

Table 4 – Hydrostatic Pressure Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Hydrostatic short term strength test	Pass	No failure during the test.

Table 5 – Impact Strength Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Impact test	Pass	Clause D.5

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TEST RESULTS (CONT'D):


Table 6 – Tensile Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements Table 5
	155mm Ø	
Uniaxial tensile test (MPa) Average	49	45
Strain at break (%) Average	197	≥ 80

Table 7 – Opacity Test

Sample Reference & Sizes	Results	SS 141: 2013 Requirements
	155mm Ø	
Opacity	Pass	Shall not transmit more than 0.2% of visible light falling on it


 Ong Ye6 Chuan
 Testing Officer


 Chua Peck Cheong
 Senior Manager

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