

TOPFLOR PLASTICS NANTONG CO., LTD.

TEST REPORT

SCOPE OF WORK

HOMOGENEOUS VINYL

REPORT NUMBER

191203011SHF-002

TEST DATE(S)

2019-12-03 - 2020-01-15

ISSUE DATE

2020-01-20

PAGES

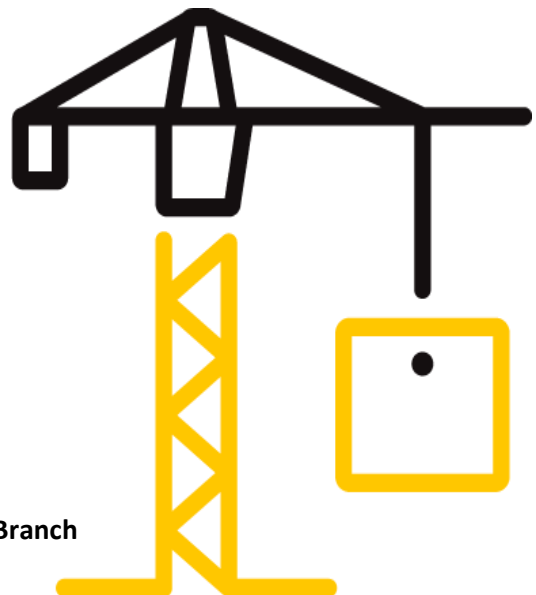
11

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10k(May 1, 2019)

© 2020 INTERTEK

Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Test Report

Statement

- 1.This report is invalid without company's special seal for testing on assigned page.
- 2.This report is invalid without authorized person's signature.
- 3.This report is invalid where any unauthorized modification indicated.
- 4.Don't copy this report in partial (except full copy) without any official approval in written by our company. This report is invalid without re-stamping the special seal for testing in copying report.
- 5.Any holder of this document is advised that this report is for the exclusive use of Intertek's Customer and is provided pursuant to the agreement between Intertek and its Customer. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. This report was made with due care within the limitation of a defined scope of work and on the basis of information, materials and instructions received from the Customer or its nominated third parties. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. The tests results are not intended to be a recommendation for any particular course of action. Customer is responsible for acting as it sees fit on the basis of such results.
- 6.Intertek's written consent is required to use Intertek's name or logo on the object, product or service being tested. The observations and test results in this report relate only to the sample under test. This report alone does not indicate that the item, product or service has passed any Intertek certification program.

Test Report

Issue Date: 2020-01-20 Intertek Report No. 191203011SHF-002
 Applicant: TOPFLOR PLASTICS NANTONG CO., LTD.
 Address: No.10 Tao Yuan Road, Nantong Jiangsu, P.R.China
 Attn: Alan
 Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	HOMOGENEOUS VINYL	Brand	/
Sample Description	Good Condition	Sample Amount	1 roll
		Received Date	2019-11-18
Sample ID	Model	Specification	
S191203011SHF.001, 003~006, 009	TOPFLOR	2m x 20m	


Test Methods And Standards

Test Standard	ISO 24346:2006, ISO 23999:2018, ISO 24344:2008 Method A, ISO 24343-1:2007, ISO 105-B02:2014, DIN 51130:2014
Specification Standard	EN ISO 10581:2013 (ISO 10581:2011)
Test Conclusion	The samples were tested according to the above standards, and the results are shown in the following page.

Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

Report Authorized



Sally Xie Jackie Zhou
 Name: Sally Xie Name: Jackie Zhou
 Title: Reviewer Title: Project Engineer

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

EN ISO 10581:2013 (ISO 10581:2011) Resilient floor coverings — Homogeneous poly(vinyl chloride) floor covering — Specification

General requirements:

Characteristics	Test requirements	Test Method	Verdict
Overall thickness	Average value: Nominal value (-0.10, +0.15)mm Individual value: Average value ± 0.15 mm	ISO 24346:2006	Pass
Dimensional stability after exposure to heat	$\leq 0.4\%$ (sheets and tiles intended for welding) $\leq 0.25\%$ (tiles intended for dry-joint laying)	ISO 23999:2018	Pass
Flexibility	20 mm mandrel, no cracking. For products which show signs of cracking, perform a further test using a 40 mm mandrel. If results show no further cracking, record the use of a 40 mm mandrel.	ISO 24344:2008 Method A	20mm Pass
Residual indentation	Average value: ≤ 0.1 mm	ISO 24343-1:2007	Pass
Colour fastness to artificial light	\geq Grade 6	ISO 105-B02:2014 Method 3	Pass

Note: Test items were selected by client.

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test Item: Overall thickness

Test Method: ISO 24346:2006

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Foot diameter of thickness gage: 8 mm

Mass applied: 400 g

Test Result:

Nominal value: 2.00 mm

Average value: 2.02 mm

Tolerance: 0.02 mm

Max. value: 2.03 mm

Min. value: 2.02 mm

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test Item: Dimensional stability and curling

Test Method: ISO 23999:2018

Conditioning:

Temperature: 23 °C

Humidity: 50 %

Duration: 24 h

Measure the initial length and curling

Test Condition:

Temperature: 80 °C

Duration: 6 h

Reconditioning:

Temperature: 23 °C

Humidity: 50 %

Duration: 24 h

Measure the final length and curling

Test Result:

Specimen	Dimensional stability (%)	
	Length direction/Machine direction	Width direction/Across machine direction
1	-0.12	0.14
2	-0.13	0.15
3	-0.07	0.14
Average	-0.10	0.15
Max.	-0.13	0.15

Note:

1. Dimensional stability = (initial length - final length)×100/initial length

Express the average value to the nearest 0.05%

A negative value indicates expansion, and a positive value indicates shrinkage .

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test Item: Flexibility

Test Method: ISO 24344:2008 Method A

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Diameter of mandrel: 20 mm

Test Result:

Surface	Length direction/Machine direction	Width direction/Across machine direction	Verdict
Face out	No crack or break	No crack or break	Pass
Face inside	No crack or break	No crack or break	

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test Item: Residual indentation

Test Method: ISO 24343-1:2007

Conditioning: Condition the test specimens at $(23 \pm 2)^{\circ}\text{C}$ and $(50 \pm 5)\%$ relative humidity for at least 24h

Test Condition:

Indenter: Steel cylindrical indenter, with the edge of the flat base slightly rounded

Indenter diameter: 11.3 mm

Total load applied: 500 N

Indentation time: 150 min

Recovery time: 150 min

Test Result:

Residual Indentation	Result (mm)
Specimen 1	0.02
Specimen 2	0.02
Specimen 3	0.02
Average value	0.02

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test Item: Colour fastness to artificial light

Test Method: ISO 105-B02:2014, Xenon-arc lamp
Exposure Cycle A1, Method 3

Test Result: Above Grade 6

Note:

1. Test item was subcontracted on accreditation by CNAS L0139.

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Test Items, Method and Results:

Test item	Test Method	Test result
Slip resistance* (Oil-wet ramp test)	DIN 51130:2014	Angle: 11.2 ° Rating: R10

DIN 51130 Classification of Slip resistance (Oil-wet ramp test)

Classification	Angle
R9	$6^\circ < X \leq 10^\circ$
R10	$10^\circ < X \leq 19^\circ$
R11	$19^\circ < X \leq 27^\circ$
R12	$27^\circ < X \leq 35^\circ$
R13	$> 35^\circ$

Note:

- *Test item is subcontracted on accreditation by CNAS L1401.

Test Report

Issue Date: 2020-01-20

Intertek Report No. 191203011SHF-002

Appendix A: Sample Received Photo



Revision:

NO.	Date	Changes	Author	Reviewer
191203011SHF-002	2020-01-20	First issue	Jackie Zhou	Sally Xie