TEST REPORT

No. : GZMR240802568001
Date : Sep 05, 2024
Page: 1 of 9

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GZMR240802568001
Verification: check.sgsonline.com.cn

CUSTOMER NAME: SHANDONG TAIFENG COMMERICIAL GROUP CO.,LTD

ADDRESS: No.79 Changshao North Road, Laiwu District, Jinan City,Shandong Province,China

Sample Name : Geomembrane

Product specification : 1mm

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

****

SGS Ref. No. : QDIN2408001667PL01

Date of Receipt : Aug 29, 2024

Testing Start Date : Aug 29, 2024

Testing End Date : Sep 05, 2024

Test result(s) : For further details, please refer to the following page(s)
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Cathy Peng
Authorized signatory

SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch Testing Laboratory

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TEST REPORT

No. : GZMR240802568001
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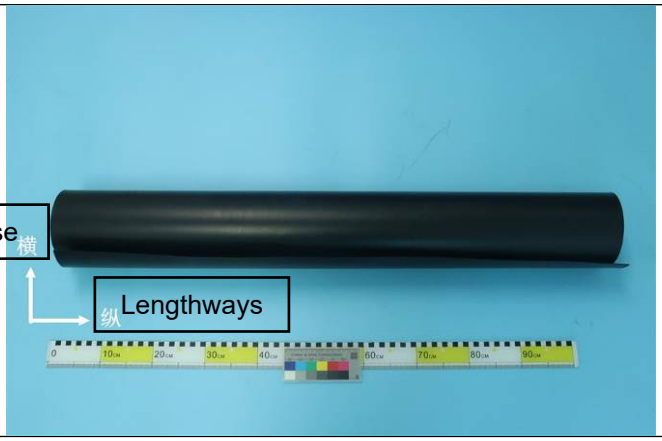
Summary of Results:

No.	Test Item	Test Method	Result		Conclusion
1	Thickness	ASTM D5199-12(2019) Procedure B	1.125mm		/
2	Density	ASTM D792-20 Method B	0.945 g/cm^3		/
3	Tensile Test	ASTM D6693/D6693M-20	See result		/
4	Tear Strength	ASTM D1004-21	Transverse	147N	/
			Lengthways	138N	
5	Puncture Resistance	ASTM D4833/D4833M-07(2020)	466N		/

Note: Pass : Meet the requirements;
Fail : Does not meet the requirements;
/ : Not Apply to the judgment.

Original Sample Photo:



Original Sample-Sample A

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TEST REPORT

1.Test Item: Thickness

Sample Description: Plastic part

Test Method: ASTM D5199-12(2019) Procedure B

Test Condition:

Load: 20kPa

Read time: 5s

Lab Environmental Condition: (23±2)℃, (50±5)%RH

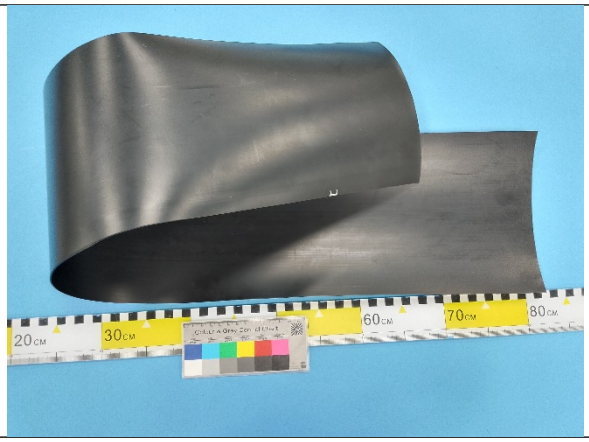
Test Result:

Test Item	Test Result
Thickness	1.125mm

Note: Test specimens were cut from the sample.

Test Photo:

Before Test-Sample A



After Test-Sample A

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Digital Thickness Gauge	0mm~9mm/0.001 mm	GZMR-PL-E025	2024-05-09	2025-05-08

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TEST REPORT

2.Test Item: Density

Sample Description: Plastic part

Test Method: ASTM D792-20 Method B

Test Condition:

Absolute alcohol, (23±0.5)℃

Lab Environmental Condition: (23±2)℃, (50±5)%RH

Test Result:

Test Item	Test Result
Density	0.945 g/cm^3

Note: Test specimens were cut from the sample.

Test Photo:

Before Test-Sample A

After Test-Sample A

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Electron Balance	XPE204	GZMR-PL-E004-06	2024-04-15	2025-04-14

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TEST REPORT

3.Test Item: Tensile Test

Sample Description: Plastic part

Test Method: ASTM D6693/D6693M-20

Test Condition:

Specimen: Dumbbell type

Specimen thickness: 0.984mm

Testing speed: 50mm/min

Gauge length: 33mm

Initial distance between grips:65mm

Lab Environmental Condition: (23±2)℃, (50±5)%RH

Test Result:

Test Item	Test Result	
Tensile Yield Strength	Transverse	18.5MPa
	Lengthways	17.2MPa
Tensile Break Strength	Transverse	34.9MPa
	Lengthways	34.4MPa
Percent Yield Elongation	Transverse	15%
	Lengthways	17%
Percent Break Elongation	Transverse	920%
	Lengthways	890%

Note: Test specimens were cut from the sample.

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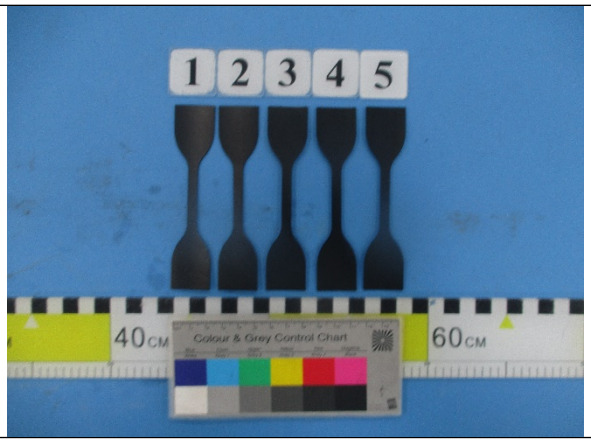
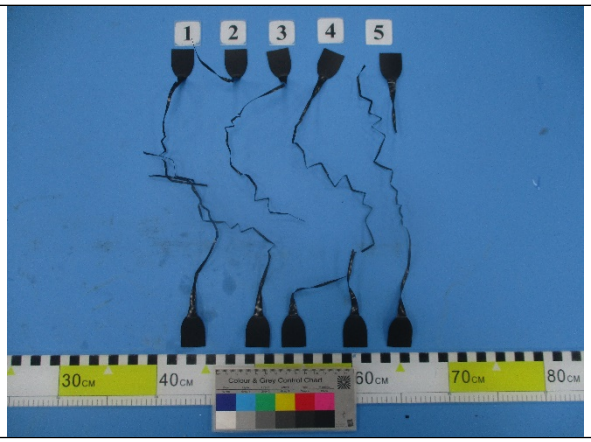
No. : GZMR240802568001
Date : Sep 05, 2024

Test Photo:

Before Test-Sample A- Transverse	After Test-Sample A- Transverse
	
Before Test-Sample A- Lengthways	After Test-Sample A- Lengthways

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Universal Testing Machine	CMT6103	GZMR-PL-E022	2024-04-16	2025-04-15

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TEST REPORT

4.Test Item: Tear Strength

Sample Description: Plastic part

Test Method: ASTM D1004-21

Test Condition:

Specimen thickness: 1.02mm

Testing speed: 51mm/min

Grip separation: 25.4mm

Lab Environmental Condition: (23±2)℃, (50±5)%RH

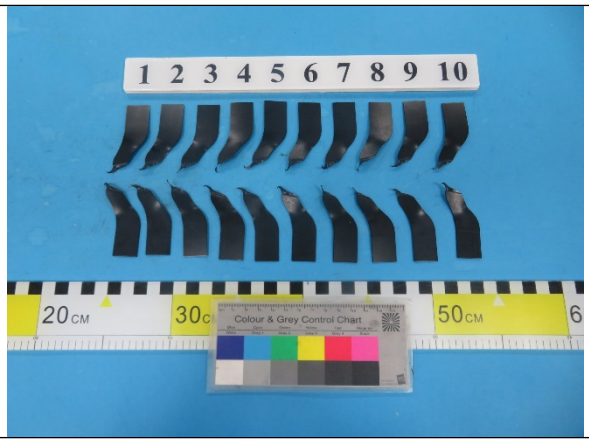
Test Result:

Test Item	Test Result	
Tear Strength	Transverse	147N
	Lengthways	138N

Note: Test specimens were cut from the sample.

Test Photo:

Before Test-Sample A- Transverse



After Test-Sample A- Transverse

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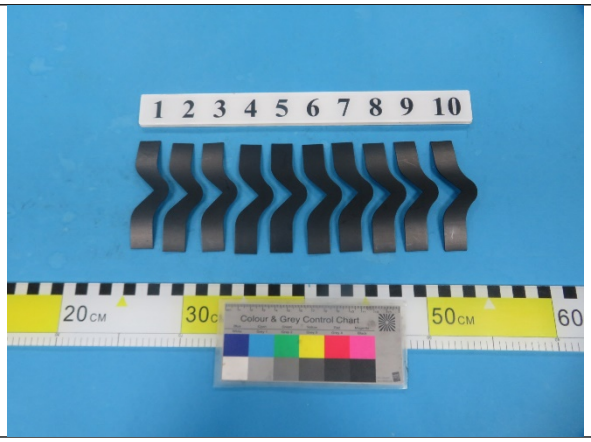	
Before Test-Sample A- Lengthways	After Test-Sample A- Lengthways

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Universal Testing Machine	Z1.0	GZMR-PL-E340	2024-04-16	2025-04-15

5.Test Item: Puncture Resistance

Sample Description: Plastic part

Test Method: ASTM D4833/D4833M-07(2020)

Test Condition:

Testing speed: 300 mm/min

Lab Environmental Condition: (23±2)℃, (50±5)%RH

Test Result:

Test Item	Test Result
Puncture Resistance	466N

Note: Test specimens were cut from the sample.

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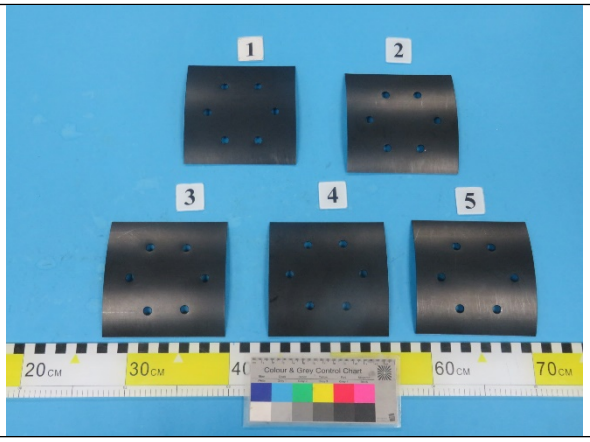	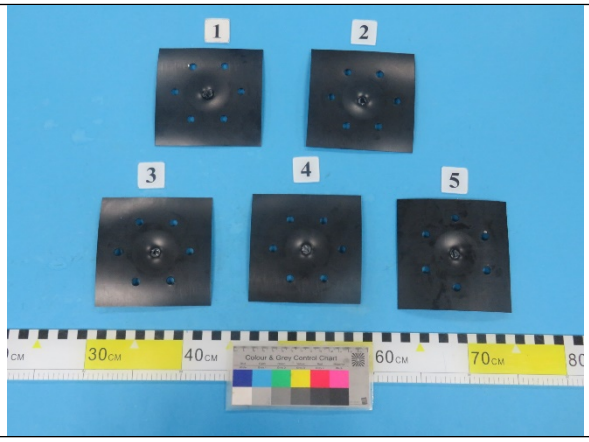
Before Test-Sample A	After Test-Sample A

Equipment Information:

Equipment	Model	Equipment No.	Calibration date	Next Calibration date
Universal Testing Machine	Z1.0	GZMR-PL-E168	2024-01-17	2025-01-16

Appendix information: The test item 1,3,5 is not in the accredited testing scope of CNAS.

******** End of report********

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