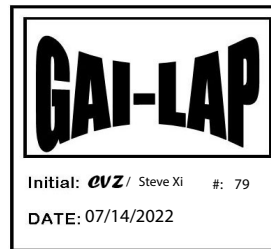


Jul 14th, 2022Ms. Sarah
CNBM INTERNATIONAL CORPORATION

Re: FINAL LABORATORY TEST REPORT 最终实验室检测报告



Dear Ms. Sarah:

Thank you for consulting TRI Suzhou for your material testing needs.

感谢选用 TRI 苏州实验室为您检测材料

Enclosed is the final laboratory report for the Conformance testing of one (1) White Nonwoven Geotextile sample .

附上一份 1 个土工织物样品的最终符合性实验室检测报告

PROJECT NAME 项目名称: Geotextile Testing

DATE REPORTED 报告日期: Jul 14th, 2022

REFERENCE TRI JOB NO. 涉及工作编号: SCH22121

DATE RECEIVED 接收日期: Jul 8th, 2022

SAMPLE(S) SENT BY 送样人: CNBM

SAMPLE IDENTIFICATIONS 样品信息:

SAMPLE ID 样品 ID

White Nonwoven Geotextile

TRI CONTROL NUMBER 受控编号

10663

TESTS REQUIRED / PERFORMED 检测需求/检毕:

TEST METHOD 检测方法

1. ASTM D4595

2. ASTM D4751

3. ASTM D4491

4. ASTM D6241

DESCRIPTION 描述

Wide Width Tensile 宽条拉伸

Apparent Opening Size 表观直径

Permittivity 渗透率

CBR Puncture 顶破强度

TEST RESULTS 检测结果: The test results are summarized in the attached Table(s) 1. 检测结果参见附表 1。

Respectfully, 此致

TRI Geosynthetic Testing and Services (Suzhou) Co., Ltd.

Steve Xi
Quality AssuranceChad Blackwell
General Manager

Signatures are on file

It shall be noted that the sample/s tested is/are believed to be true representatives of the material produced under the designation herein stated. In addition, the attached laboratory tests results are considered indicative only of the quality of samples/specimens that were actually tested. The appropriate test methods hereby employed are based on the current and accepted industry practices. TRI neither accepts responsibility for nor makes claims to the intended final use and purpose of the material. The test data and all associated project information shall be held confidential and not to be reproduced and/or disclosed to other parties except in full and with prior written approval from the client or any pertinent entity duly authorized by the respective client. It is our policy to keep physical records of each job for five (5) years commencing from the date of receipt of the samples and keep its corresponding electronic file for seven (7) years. Retained conformance samples are disposed of after one (1) month. On the other hand, should you need us to keep them at a longer period, please advise us in writing.

需说明的是, 所送检样品会被认为是根据设计所生产材料的真实代表。另外, 所附实验室检测结果仅表明所检测样品质量。此次合适的检测方法的采用是根据目前通用行业实际情况。TRI 既不对样品接受负责也不对材料的最终使用目的及用途发表声明。检测数据及相关项目信息为商业秘密, 不得复制, 非经客户书面同意或授权同意不得外泄给其他机构。我司自接收样品日起保存纸质记录 5 年, 保存相应电子记录 7 年。样品留存 1 个月后废弃。如需保存更长时间, 请以书面方式提前通知

3 Pages Total (including this sheet)

TABLE 表 1.
MATERIAL PROPERTIES

材料属性

CLIENT客户: CNBM INTERNATIONAL CORPORATION

PROJECT项目: Geotextile Testing

Date Received接收日期: **2022.07.08**

Date Reported报告日期: **2022.07.14**

Client Sample ID样品信息: **White Nonwoven Geotextile 白色无纺布**

Material Description材料描述: **White Nonwoven Geotextile 白色无纺布**

QC'd By质量担当: *Steve/李. 强.*

TRI Job No.工作编号: **SCH22121**

TRI Control No.受控编号: **10663**

SPECIMENS样品

	1	2	3	4	5	6	7	8	9	10	Avg. 平均值	Std. Dev. 标准偏差	Min 最小值	Max 最大值
METHOD 方法描述														
ASTM D4595 Wide-Width Strip Tensile宽条拉伸性能														
Test was performed as directed in ASTM D4595, dry condition. CRE Type Tensile Testing Machine (YT010P) equipped with 2" x 8" (50mmX 200mm) Grips														
检测按照 ASTM D4595 指导进行, 干燥条件. 拉伸测试仪附带 2 in x 8 in (50mmX 200mm) 夹具。														
was used. set for 0.4" (10 mm/min) constant rate of extension, with initial gauge length (distance between grips) of 4"(100mm)														
设定恒定拉伸速率 0.4" (10 mm/min), 夹具初始距离为 4"(100mm). 样本尺寸: 8in X 8in(200mm X200mm). 检测的全量程范围: 18000 lbs (80000 N)														
Specimen Size: 8" X 8" (200mm X200mm). Full scale force range used for testing: 18000lbs (80000N)														
Tensile Strength 拉伸强度 (kN/m)														
沿机方向 MD	19	18	18	17	19	18					18	1	17	19
非沿机方向 TD	20	22	20	22	21	20					21	1	20	22
Elongation at Break/断裂延伸率 (百分比percent)														
沿机方向 MD	59	59	59	56	60	58					58	1	56	60
非沿机方向 TD	62	61	60	64	63	61					62	2	60	64
ASTM D4491 Permittivity渗水率 (sec. ⁻¹)														
Constant Head 恒压水头														
Four specimens were tested by holding the head constant at 50 mm. The corresponding water volume passing through the specimen was collected														
通过保持在常压水头 50mm 中检测四个样品. 用相应的水量通过样品并在另一侧收集, 记录量和时间														
at the discharge side and the amount and time recorded. Five readings were taken for each specimen. Four specimens were tested.														
每个样品读取 5 个数, 共检测 4 个样本, 使用的设备符合 ASTM D4491 的要求														
The apparatus compliant to ASTM D4491 requirements was used.														
	1.11	1.12	1.13	1.10							1.12	0.02	1.10	1.13
Permeability (cm./ sec.)														
	0.34	0.34	0.34	0.33							0.34	0.00	0.33	0.34
Flow Rate (l/sec/m ²)														
	56	57	58	56							57	1	56	58

(Continued on next page)

(Sheet 1 of 2)

TABLE 表 1.
MATERIAL PROPERTIES

材料属性

CLIENT客户: CNBM INTERNATIONAL CORPORATION

PROJECT项目: Geotextile Testing

Date Received接收日期: 2022.07.08

Date Reported报告日期: 2022.07.14

Client Sample ID样品信息: White Nonwoven Geotextile 白色无纺布

Material Description材料描述: White Nonwoven Geotextile 白色无纺布

QC'd By质量担当: 

TRI Job No.工作编号: SCH22121

TRI Control No.受控编号: 10663

SPECIMENS样品

	1	2	3	4	5	6	7	8	9	10	Avg. 平均值	Std. Dev. 标准偏差	Min 最小值	Max 最大值
METHOD	DESCRIPTION方法描述													
ASTM D4751	Apparent Opening Size / 表观孔径 (美国标准筛 U.S. standard sieve size) Specimens were tested as directed in Test Method D4751. Type of sieve shaker used was W.S. Tyler Rotap. 样品被检测按 D4751 指导进行。振动筛类型是 W.S. Tyler Rotap													
	100-140	100-140	100-140	100-140	100-140						100-140	N/A		
ASTM D4751	Apparent Opening Size / 表观孔径 (mm) Specimens were tested as directed in Test Method D4751. Type of sieve shaker used was W.S. Tyler Rotap. 样品被检测按 D4751 指导进行。振动筛类型是 W.S. Tyler Rotap													
	0.147	0.147	0.145	0.148	0.145						0.146	0.001	0.14	0.15
ASTM D6241	Static Puncture Strength 静态穿刺强度 (N) The specimens were tested in accordance with ASTM D6241. Specimens were conditioned for 1 hr in the laboratory at 21 +/- 5 °C 样品按照 ASTM D6241 的要求进行测试, 样品在实验室环境下温度: 21 +/- 5 °C 相对湿度: 60% +/- 10 调湿一小时 (75 +/- 3.6 °F) and at 60% +/- 10 Relative Humidity. Specimens were secured between the holding plates ensuring that they 样品需要牢固的夹持在盘中。待检样品需超过或漏出圆盘夹具的边缘。 extended to or beyond the outer edges of the clamping plates.													
	3194	3895	3160	3641	4193	4091	3450	3581	4346	3436	3699	415	3160	4346

End of Table 1

(Sheet 2 of 2)

By accepting the data and results presented on this report, the Client agrees to limit the liability of TRI SUZHOU from Client and all other related parties for any claims on issues, due to the use of this data, to the cost respective of the tests presented in this report; and the Client agrees to indemnify and hold harmless TRI SUZHOU from and against all liabilities in excess of the aforementioned limits.

通过接受了这篇报告中数据和结果, 客户同意限定 TRI 苏州来自客户和所有其他相关方的责任。所有其因使用这些数据索赔问题, 报告中提出的各项检测的成本; 客户同意赔偿并承担后果, TRI 苏州不承担超过上述限额的所有责任。