



国家化学建筑材料测试中心

NATIONAL
TEST CENTER
OF POLYMER AND
BUILDING MATERIALS



230002349849



中国认可
国际互认
检测
TESTING
CNAS L1049

National Test Center of Polymer & Building Materials

Address: No. 14, Beisanhuandonglu, Chaoyang District, Beijing, China Post Code: 100013

Tel: +86(0)1064208747, +86(0)1064200694, +86(0)1064224642, +86(0)1059202479

Fax: +86(0)1059202784, +86(0)1084290301 Web site: www.plasticstest.net

No. 2024(X) 11060

CUSTOMER: Haoyang Environmental Co., Ltd

SAMPLES FOR TESTING

Name: Geosynthetics Clay Liner (GCL)

Manufacturer: Haoyang Environmental Co., Ltd

Specification: 4000g/m²

Appearance: White/black

DATE OF RECEIPT: 2024-10-30

ISSUE DATE: 2024-11-21

THIS REPORT COMPRISES 2 PAGES.

DIRECTOR: 武明

CHECK: 毛安洪





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TESTING RESULTS

No. 2024(X)11060

| No. | Test Items | | Requirements | Results | Test Methods |
|-----|--|--------------|------------------------|-----------------------|-------------------------|
| 1 | Mass per unit area of GCL, g/m ² | | ≥4000 | 4038 | ASTM D5993-18(2022) |
| 2 | Coefficient of thickness variation, % | | -5~+10 | 2.49 | ISO 9863-1:2016+A1:2019 |
| 3 | Swell index, mL/2g | | ≥24 | 24.5 | ASTM D5890-19 |
| 4 | Tensile strength, kN/m | longitudinal | ≥4 | 11.6 | ASTM D6768/D6768M-20 |
| 5 | Tensile strength, kN/m | longitudinal | ≥11 | 13.9 | ISO 10319:2015 |
| 6 | Peel strength, N/m | longitudinal | ≥360 | 926 | ASTM D6496/D6496M-23a |
| 7 | Coefficient of permeability, m·s ⁻¹ | | ≤5.0×10 ⁻¹¹ | 3.9×10 ⁻¹¹ | ASTM D5887/D5887M-22a |
| 8 | Index of flus, (m ³ /m ²)/s | | <1×10 ⁻⁸ | 1.32×10 ⁻⁹ | ASTM D5887/D5887M-22a |
| 9 | Fluid loss, mL | | ≤18 | 16.1 | ASTM D5891/D5891M-19 |

Note: The test items above were conducted at Tongzhou branch.

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Test: 张壮飞 宋超