

Characteristic Tên chỉ tiêu	Unit Đơn vị	Test method Phương pháp thử nghiệm	Test result / Kết quả thử nghiệm	
			Sample 0 Mẫu 0	Sample 2 Mẫu 2
1. pH value / Độ pH	-	SMEWW 2023 (2340B)	7.71	7.74
2. Total hardness as CaCO ₃ / Độ cứng tổng	mg/L	SMEWW 2023 (2340B)	40.3	47.2
3. Turbidity / Độ đục	NTU	SMEWW 2023 (2330B)	0.12	0.39
4. Ammonium nitrogen (as N-NH ₃) Hàm lượng amoni	mg/L	SMEWW 2023 (4500-NH ₃ -F)	N.D (LOD=0.03)	N.D (LOD=0.03)
5. Chloride (as Cl-) / Hàm lượng clorua	mg/L	SMEWW 2023 (4500-Cl-D)	28.9	29.0
6. Sulfate (as SO ₄ ²⁻) Hàm lượng sunphat	mg/L	SMEWW 2023 (4500-SO ₄ ²⁻ E)	6	7
7. Color value / Màu sắc	Pt-Co	SMEWW 2023 (2120B)	<5	<5
8. Nitrate (as NO ₃ ⁻) Hàm lượng nitrat	mg/L	TCVN 6180 : 1996	1.16	0.56
9. Nitrite (as NO ₂ ⁻) Hàm lượng nitrit	mg/L	ISO 6777 : 1984	N.D (LOD=0.01)	N.D (LOD=0.01)
10. Manganese (Mn) Hàm lượng mangan	mg/L	SMEWW 2023 (3111B)	N.D (LOD=0.02)	N.D (LOD=0.02)
11. Iron (Fe) Hàm lượng sắt	mg/L	SMEWW 2023 (3111B)	N.D (LOD=0.02)	N.D (LOD=0.02)
12. Arsenic (As) Hàm lượng asen	mg/L	US EP 200.8 : 1994 (ICP-MS)	N.D (LOD=0.01)	N.D (LOD=0.01)
13. Permanganate index Chỉ số pemanganat	mg/L	ISO 8467 : 1993	N.D (LOD=0.5)	N.D (LOD=0.5)

Note / Ghi chú:

- N.D = not detected (<LOD) / không phát hiện.
- LOD : Limit Of Detection / Giới hạn phát hiện.

*** END OF THE REPORT ***

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B. Test result of domestic water before and after soaking sample / Kết quả thử nghiệm nước sinh hoạt trước và sau khi ngâm mẫu

Sample description / Mô tả mẫu:

Notation / Ký hiệu	Name of sample / Tên mẫu	Remark / Lưu ý
Sample 0 / Mẫu 0	Domestic water before soaking sample Nước sinh hoạt trước khi ngâm mẫu	-
Sample 2 / Mẫu 2	Domestic water after soaking sample Nước sinh hoạt sau khi ngâm mẫu	See sample soaking procedure below Xem quy trình ngâm mẫu bên dưới

Soaking procedure specified by client / Quy trình ngâm mẫu do khách hàng chỉ định:

- Client request to use domestic water taken directly from SGS for testing.
Khách hàng yêu cầu sử dụng nước sinh hoạt lấy trực tiếp tại SGS để thử nghiệm.
- Soaking procedure / Quy trình ngâm mẫu:
 - Cut 10 test specimens with dimensions of 50mmx50mm / Cắt 10 mẫu thử với kích thước 50mmx50mm.
 - Remove the release paper from the test specimens / Tách lớp giấy chống dính ra khỏi miếng mẫu thử.
 - Soak the test specimens in domestic water at a temperature of $(23\pm 2)^{\circ}\text{C}$ and relative humidity of $(50\pm 10)\%$ for 30 days / Ngâm mẫu thử trong nước sinh hoạt ở nhiệt độ $(23\pm 2)^{\circ}\text{C}$ và độ ẩm tương đối $(50\pm 10)\%$ trong 30 ngày.
 - After 30 days, take out the test specimens and test the parameters of water after soaking / Sau 30 ngày, lấy mẫu thử ra và tiến hành thử nghiệm các chỉ tiêu của nước sau khi ngâm.

Photo(s) of water before and after soaking sample / Hình ảnh nước trước và sau khi ngâm mẫu:

	
Sample 0 / Mẫu 0	Sample 2 / Mẫu 2
SGS authenticate the photos on original report only / SGS chỉ xác thực các hình ảnh trong báo cáo chính thức	

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Characteristic <i>Tên chỉ tiêu</i>	Test method <i>Phương pháp thử nghiệm</i>	Test result <i>Kết quả thử nghiệm</i>
10. Heat resistance at 90°C for 2 hours / Độ bền nhiệt ở 90°C trong 2 giờ	ASTM D5147/ D5147M - 14	No flowing, no dripping <i>Không chảy, không nhỏ giọt</i>
11. Water permeability at hydrostatic pressure / Độ thấm nước dưới áp lực thủy tĩnh	TCVN 9067-4 : 2012	Pass / Đạt yêu cầu (No moist traces or water drops on the underside of test specimens / Không có vết ẩm hoặc giọt nước nào ở mặt dưới của mẫu)
12. Watertightness under water pressure of 60 kPa for 48 hours / Độ kín nước dưới áp lực nước 60 kPa trong 48 giờ	BS EN 1928 : 2000 (Method B)	Pass / Đạt yêu cầu (The test specimens remain watertight after testing / Mẫu thử vẫn kín nước sau thử nghiệm)

Sample photo(s) / Hình ảnh mẫu nhận:



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Characteristic <i>Tên chỉ tiêu</i>	Unit <i>Đơn vị</i>	Test method <i>Phương pháp thử nghiệm</i>	Test result <i>Kết quả thử nghiệm</i>
9.1. Peel adhesion on concrete substrate ^(c) <i>Độ bám dính trên nền bê tông</i>		ASTM D903 - 98 (2017)	
• Peel or stripping strength <i>Độ bền bong tróc</i>	N/mm		0.74
9.2. Peel adhesion on fiber cement substrate ^(c) <i>Độ bám dính trên tấm nền xi măng sợi</i>		ASTM D903 - 98 (2017)	
• Peel or stripping strength <i>Độ bền bong tróc</i>	N/mm		0.75
9.3. Peel adhesion on polycarbonate substrate ^(c) <i>Độ bám dính trên tấm nền polycarbonate</i>		ASTM D903 - 98 (2017)	
• Peel or stripping strength <i>Độ bền bong tróc</i>	N/mm		0.76
9.4. Peel adhesion on glass substrate ^(c) <i>Độ bám dính trên tấm nền kính</i>		ASTM D903 - 98 (2017)	
• Peel or stripping strength <i>Độ bền bong tróc</i>	N/mm		0.72
9.5. Peel adhesion on galvanized steel substrate ^(c) <i>Độ bám dính trên tấm nền thép mạ kẽm</i>		ASTM D903 - 98 (2017)	
• Peel or stripping strength <i>Độ bền bong tróc</i>	N/mm		0.63

Note / Ghi chú:

- Lab environmental conditions / Điều kiện môi trường phòng thử nghiệm : (23±2) °C, (50±10) %RH.
- (a) Test speed : 100 mm/min / Tốc độ thử : 100 mm/phút. Gauge length / Chiều dài tính toán ban đầu: 100 mm.
- (b) Test speed : 100 mm/min / Tốc độ thử : 100 mm/phút.
- (c) Test speed : 152.4 mm/min / Tốc độ thử : 152.4 mm/phút.

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A. Test result of No. 4420 Maxell Super Butyl Tape - Single coated (Base material: Polyester nonwoven fabric) sample I *Kết quả thử nghiệm mẫu màng chống thấm tự dính Butyl Maxell Polyester 4420*

Characteristic <i>Tên chỉ tiêu</i>	Unit <i>Đơn vị</i>	Test method <i>Phương pháp thử nghiệm</i>	Test result <i>Kết quả thử nghiệm</i>
1. Tensile strength ^(a) <i>Độ bền kéo</i>	N/50mm	EN 12311-2 : 2013 (Method A)	269.6
2. Elongation at break ^(a) <i>Độ giãn dài tại điểm đứt</i>	%	EN 12311-2 : 2013 (Method A)	53.7
3. Thickness of sample <i>Chiều dày mẫu</i>	mm	ISO 4593 : 1993	0.84
4. Shear resistance of joints ^(b) <i>Cường độ chịu cắt của mối nối</i>	N/50mm	BS EN 12317-2 : 2010	166.2
5. Resistance to tearing ^(b) <i>Độ kháng xé</i>	N	EN 12310-2 : 2018	116.6
6. Heat aging at 100°C for 7 days <i>Lão hóa nhiệt ở 100°C trong 7 ngày</i>		ASTM D573 - 04 (2019)	-
6.1. Tensile strength after heat aging ^(a) <i>Độ bền kéo sau lão hóa nhiệt</i>	N/50mm	EN 12311-2 : 2013 (Method A)	326.9
6.2. Elongation at break after heat aging ^(a) / <i>Độ giãn dài tại điểm đứt sau lão hóa nhiệt</i>	%		45.4
7. Dimensional stability (exposure at (-20)°C for 2 hours) <i>Độ ổn định kích thước (chịu nhiệt ở (-20)°C trong 2 giờ)</i>		Refer / Tham khảo ASTM D1204-14	
• Change in length <i>Thay đổi chiều dài</i>	%		(-) 0.378
• Change in width <i>Thay đổi chiều rộng</i>	%		(-) 0.598
8. Change in mass after immersion in toluene for 46 hours / <i>Thay đổi khối lượng sau khi ngâm toluen trong 46 giờ</i>	%	ASTM D471 - 16a	(-) 30.1

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Client's name / Tên khách hàng : MAXELL, LTD.

Client's address / Địa chỉ : 3819, NOBORITO, TAMA-KU, KAWASAKI, JAPAN 214-0014

The following sample(s) was/were submitted and identified by the client as:

Các thông tin nhận dạng mẫu do khách hàng cung cấp:

Name of sample / Tên mẫu : No. 4420 Maxell Super Butyl Tape - Single coated (Base material: Polyester nonwoven fabric) / *Màng chống thấm tự dính Butyl Maxell Polyester 4420*

Quantity / Số lượng mẫu : 01 sample / mẫu (04pcs)

Tets request / Yêu cầu thử nghiệm :

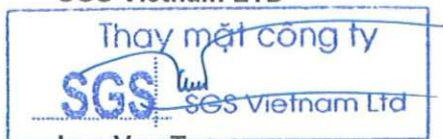
- Samples provided by client / *Mẫu do khách hàng cung cấp: No. 4420 Maxell Super Butyl Tape - Single coated (Base material: Polyester nonwoven fabric) / *Màng chống thấm tự dính Butyl Maxell Polyester 4420**
- Domestic water is taken directly from SGS / *Nước sinh hoạt được lấy trực tiếp tại SGS.*
- Test the parameters of domestic water before and after use to soak No. 4420 Maxell Super Butyl Tape - Single coated (Base material: Polyester nonwoven fabric) / *Thử nghiệm các chỉ tiêu của nước sinh hoạt trước và sau khi sử dụng để ngâm mẫu màng chống thấm tự dính Butyl Maxell Polyester 4420*

Date of receiving / Ngày nhận mẫu : 26-Aug-2025

Date of testing / Thời gian thử nghiệm : From / từ 26-Aug-2025 to / đến 13-Oct-2025

Test result / Kết quả thử nghiệm : See next page(s) / Xem trang sau

Signed for and on behalf of
SGS Vietnam LTD



Luu Van Trung
Laboratory Supervisor
Industrial Services

Please extract your time to give us your feedback as this will help our service better. Thank you!



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