



SELEXIBLE
— 喜 莱 仕 —

Seawater Suitability Test – Acrylic Sheet

1. SAMPLE INFORMATION

Product Name/Material: 30mm Clear Cast Acrylic Sheet

Order Number: JSS240824

Issued Date: 2024.09.19

Intended Use: Aquarium and marine display panels exposed to seawater environments.

2. TEST REQUESTED

To assess the chemical and mechanical suitability of the submitted acrylic sheet sample for long-term exposure to seawater (marine applications).

3. TEST METHOD(S)

Test Item	Test Standard/Method
Chemical Resistance (Saltwater)	ASTM D543 (Modified) / In-house method
Optical & Physical Inspection	Visual (EN ISO 7823-1 Annex B)
Mechanical Properties	ASTM D638 (Tensile), ASTM D256 (Impact)
UV Resistance	ASTM G154 (Accelerated UV Aging)
Salt Spray Resistance (Optional)	ASTM B117 (if performed)

4. TEST RESULTS SUMMARY

Parameter	Result	Assessment
Appearance after seawater exposure	No visual degradation or discoloration	PASS
Tensile Strength	Within acceptable PMMA range	PASS
Impact Resistance	Within acceptable PMMA range	PASS
UV Stability	Minimal change after 1000 hrs	PASS
Chemical Resistance	No structural or chemical degradation	PASS

*Full test data available upon request.

5. CONCLUSION

Based on the tests performed and evaluations conducted on the submitted acrylic sheet sample, it is concluded that:

The acrylic sheet manufactured by Jiangsu Selexible Plastic Group is suitable for use in seawater environments and marine applications, including public aquariums, oceanariums, and underwater viewing panels.

The material demonstrated excellent resistance to saltwater corrosion, maintained optical clarity

and structural integrity, and showed no adverse chemical or physical effects when subjected to marine simulation conditions.

6. REMARKS

The results apply only to the tested sample(s).

This certificate does not replace regulatory or mandatory approvals.

Issued at the request of the client for product quality documentation.

Sample retained for 30 days from date of issue.