化学耐受表 · Chemical Resistance Table

FRP Grating Chemical Resistance Table — by Concentration and Temperature

NANTONG ZEALL (ZeAllgrate) · founded 2004 · plant 20,000+ m² · 200+ staff · exported to 40+ countries · indicative figures for preliminary design; confirm against project calculation before ordering.

1. How to read this table

Ratings: A = suitable for continuous immersion / splash; B = suitable for splash and intermittent exposure; C = test required / not recommended. All ratings are indicative at room temperature (20-25 °C); at higher temperature or concentration, move one grade down. Confirm in writing for any critical service.

2. Chemical resistance by resin and medium

Medium	Conc.	Temp.	Ortho	Iso	Vinyl ester	Epoxy
Acetic acid	<10 %	<40 °C	B	A	A	A
Acetic acid	>50 %	<40 °C	C	C	B	B
Sulfuric acid	<10 %	<40 °C	C	B	A	A
Sulfuric acid	10-50 %	<40 °C	C	C	B	B
Hydrochloric acid	<20 %	<40 °C	C	B	A	A
Nitric acid	<10 %	<40 °C	C	C	B	B
Phosphoric acid	<50 %	<40 °C	C	B	A	A
Sodium hydroxide	<10 %	<40 °C	C	B	A	B
Sodium hydroxide	10-30 %	<40 °C	C	C	B	C
Sodium hypochlorite	<15 %	<40 °C	C	C	B	B
Ammonium hydroxide	<20 %	<40 °C	C	B	A	A
Seawater / brine	—	<60 °C	B	A	A	A
Mineral oil	—	<80 °C	A	A	A	A
Gasoline / diesel	—	<40 °C	B	B	A	A
Ethanol	<50 %	<40 °C	C	C	B	A
Methanol	pure	<40 °C	C	C	C	B
Acetone	pure	<40 °C	C	C	C	C
Wastewater (municipal)	—	<50 °C	B	A	A	A

A = suitable, B = intermittent / splash, C = not recommended or test required. These ratings are indicative; we will not issue a warranty on immersion service without a written medium brief and a resin confirmation.

Appendix A — Multilingual glossary (EN / DE / ES / FR)

English	Deutsch (DE)	Español (ES)	Français (FR)
FRP / GRP grating	GFP-Gitterrost / GFK-Gitterrost	Rejilla PRFV	Caillebotis PRV
Fibreglass / fiberglass	Glasfaser / GFK	Fibra de vidrio	Fibre de verre
Moulded grating	Pressguss-Gitterrost	Rejilla moldeada	Caillebotis moulé
Pultruded grating	Pultrusions-Gitterrost	Rejilla pultruida	Caillebotis pultrudé
Resin	Harz	Resina	Résine
Isophthalic polyester	Isophthalsäure-Polyester	Poliéster isoftálico	Polyester isophtalique
Vinyl ester	Vinylester-Harz	Resina viniléster	Résine vinylester
Barcol hardness	Barcol-Härte	Dureza Barcol	Dureté Barcol
Load / deflection	Last / Durchbiegung	Carga / flecha	Charge / flèche
Span	Stützweite	Luz	Portée
Clip / fastener	Klammer / Befestiger	Abrazadera / fijación	Agrafe / fixation
Kick plate / toe board	Riffelblech / Fußleiste	Zócalo	Plinthe
Handrail / guardrail	Handlauf / Schutzgeländer	Pasamanos / barandilla	Garde-corps / main courante

DE = GFK (glasfaserverstärkter Kunststoff) · ES = PRFV (plástico reforzado con fibra de vidrio) · FR = PRV (plastique renforcé de fibres de verre).

Appendix B — How to order

Step	What to send us	What we return
1. Brief	Application, medium, temperature, span, load	Recommended build-up and resin
2. Drawing	Plan view, support layout, cut-outs	Cutting list and panel count
3. Confirm	Resin grade, colour, surface (smooth / concave / grit)	Pi with price and lead time
4. Production	Deposit received	Production, QA, packing
5. Shipment	Balance or LC	FOB Shanghai / CFR / CIF per agreed term

Commercial term	Value
Minimum order (MOQ)	10 m²
Standard lead time	12-36 working days (stock to production)
Exceptional lead time	Oversize, custom colour, new die, special resin — confirmed separately
Standard panel	1220 x 3660 mm; cut-to-size on diamond saw
Density	1.5-2.0 g/cm³ depending on resin and glass content
Barcol hardness	>= 40 on a sound panel
Quality system	GB/T19001-2000 idt ISO9001:2000 · reg. 01708Q11888R0S
Product test report	ASTM F3059 report 211122012SHF-001 (grating only)
Contact	sales@gratingfrp.com · www.gratingfrp.com · Nantong, China

We do not issue SGS load reports, ABS product design assessments, or named-customer case references without a written release. Any figure in this sheet is indicative for preliminary design and must be confirmed by a stamped project calculation before ordering.

Issued 2026-11-16 · www.gratingfrp.com · sales@gratingfrp.com · Figures are indicative and do not replace a project-specific load calculation.