

## EVERFLEX AQUA MATE

### DESCRIPTION

EVERFLEX AQUA MATE is a high modulus, reactive curing silicone sealant specifically formulated for aquarium manufacture. It remains permanently flexible, forming a watertight seal. It conforms to the performance requirements of BS 5889, Type B.

### BENEFITS

- Free from fungicide and solvent - will not harm fish.
- Fast cure - gives quick early strengths.
- Extremely low dirt pick up.
- Waterproof seal - will withstand continuous water immersion.

### AREAS FOR USE

- \* All sealing applications in aquaria.
- \* Sealing of pond liners and all supply/drainage piping.

### LIMITATIONS

- On highly porous surfaces such as new concrete, priming is advised.
- Not for use on substrates that may bleed oils, solvent or plasticisers.
- As pond liner materials vary in quality, always test a small area first for adhesion.
- Always wash out ponds and aquaria after use to remove residual acetic acid. Test pH before use.
- Allow sealant to fully cure before moving/filling with water.

### SURFACE PREPARATION

All surfaces must be clean, dry and dust free. All loose or flaking surface coatings, and old sealant and mastic joints, should be removed before application. All glass must be cleaned prior to use.

### APPLICATION

The surfaces to be must be clean, dry and free from dust, grease and other contaminants. Priming is generally not required.

Glass must be toughened or laminated. Do not use tempered glass (shattering risk). The following guide is useful in choosing the required glass thickness.

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AQUARIUM LENGTH (m)	WATER HEIGHT (m)	REQ. GL. THICKNESS (mm)
0.6	0.3	8
1.0	0.4	8
1.0	0.5	10
1.5	0.5	12
1.5	0.6	15

NOTE: Edges of glass must be filed to avoid risk of injury in handling.

It is also important to note that the aquarium must be placed on a level surface so that hydrostatic pressure is evenly spread.

The joint must consist of two parts:

A/ Sealing joint: the depth of which must be identical to the width of glass used.

B/ Structural seal: a triangular shaped joint applied to the interior edges of the glass. The required dimensions of this joint can be calculated from the following equation:

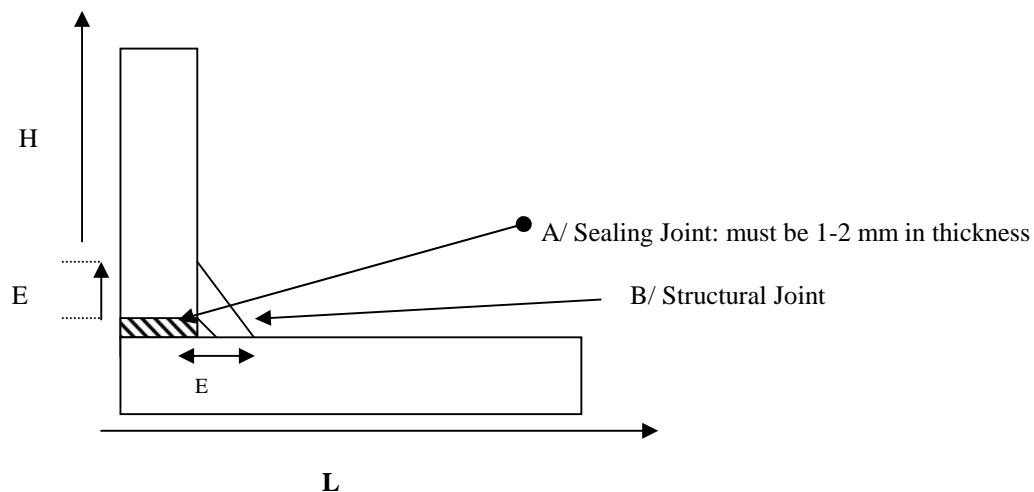
$$E = \frac{6 \times H^2 \times L}{100 \times T \times 2 (H + L)}$$

where E is required thickness of structural seal in mm

H = height of aquarium, in cm

L = Length of aquarium in cm

T = Tensile strength of sealant (kg/cm<sup>2</sup>) which for AQUA MATE is 10.



All glass etc should be thoroughly cleaned and degreased., and apply the following method:

- Put base on flat surface.
- Apply bead of approximately 3mm diameter on the 2 large panels, placing it about 3mm from the edge.
- Place back panel. Press down to reduce joint thickness to 1-2mm.
- Hold in position (eg rest against back wall).

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- Apply beads of sealant to edge of small panel and corresponding large panel.
- Push edges of large and small panel together.
- Hold in place (temp) with adhesive tape.
- Repeat for second small panel.
- Fit front panel on last.
- Apply structural joint of required thickness to all internal faces and finish with dowel to push home sealant.
- Allow to cure for 24 hours before moving.
- Allow to fully cure and rinse out thoroughly before use.


#### SPECIFIC DATA

Movement accommodation:	+ or -25%
Skinning time:	5 mins @ 20°C
Cure time:	3mm per 24 hours
Hardness Shore A:	22
Shrinkage:	<5%
Service temperature resistance:	-40°C to + 180°C
Application temperature	+5°C to + 30°C
Tensile Strength	1.0 Mpa (10kg/m <sup>2</sup> )
Stress	0.3 MPa
Specific gravity:	1.03
Cleaning:	Uncured sealant white spirit; Cured sealant: EVERFLEX SILICONE EATER
Coverage:	@ 10 linear metres 9 x 9mm fillet joint
Elongation at break:	500%

#### HEALTH AND SAFETY

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EVERFLEX AQUA MATE SILICONE	
	<ul style="list-style-type: none"><li>-Irritating to eyes</li><li>-Avoid contact with skin and eyes.</li><li>-Acetic acid is evolved during cure.</li><li>-Keep out of reach of children</li></ul>
IRRITANT	

#### STORAGE

Store in cool dry conditions between + 5°C and 25°C.

#### SHELF LIFE

Use within 18 months.

NOTE: THE METHOD DETAILED ABOVE IS SUITABLE FOR AQUARIA UPTO 400LTRS (85 GALLON) IN CAPACITY.

THE INFORMATION GIVEN IN THIS DOCUMENT IS FOR GUIDANCE ONLY AND DOES NOT CONSTITUTE A GUARANTEE ON OUR PART. ALWAYS MAKE UP AND TEST ASSEMBLIES FOR EACH SPECIFIC CASE.