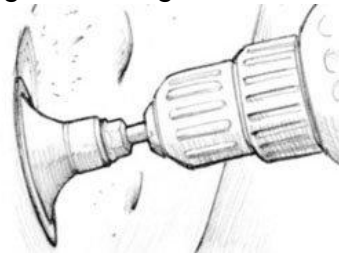


Many fibreglass pools may have osmosis, (blisters/bubbles) breaking through the surface.

There are some key aspects to successfully dealing with Osmosis, though it's very unlikely you will stop it coming back over the years.

Feed back and experience to date suggests the following is a good approach.

- Empty pool (see Epotec Application Notes for details.)
- Observe extent of blisters while giving the surface a good detergent wash.
- Use an angle grinder or drill with #40 – 60 grit flexible sanding disc (or a suitable grinding disc such as 3M's Rolock™ 50mm ) to remove all blisters and surrounding areas to about 25 -30 mm beyond blisters. You will cut into the fibreglass itself and there may be water visible. Be careful not to go right through but to a depth of about 5 mm or less.
- Wipe out such areas with paper towels soaked in rubbing isopropyl alcohol, to help remove water. Don't over use towels but replace with new. Allow to dry for as long as possible, several dry windy days at least. Cover Pool with tarp if wet weather expected.



- To fill holes use 10oz fibreglass cloth and WEST SYSTEM Epoxy 105/206, 6 Kg - B pack (slow) (Usually available from a boat chandler or [www.westsystem.com.au](http://www.westsystem.com.au)) Sand back once cured.
- Then fill remaining voids with same to fill up to nearby surfaces.
- Also can add either West System fillers 403 or 405, to fill out mix into a paste consistency. Follow guide lines in the West Systems pack. Use West System Mini Pumps for accurate resin – hardener ratios and good curing outcomes.
- Once cured, sand back flush with adjoining areas.
- Now you are ready to mix and apply Epotec hi build epoxy coating.



NOTE: Wear dust filters, eye protection etc when carrying out this work.

## Fibreglass Pool Osmosis

### What is it and how to deal with it.

**Osmosis** (hydrolytic degradation of permanently immersed fibreglass laminates) is a common issue with some if not many fibreglass pools (and boats). The contributing factors to these processes are: poor wetting of fibres, air entrapment in fibre bundles, hydrolysis of sizing, hydrolysis of resin matrix etc. So it can be closely related to the manufacturing techniques and the materials used along with the skill of the fibreglass operators at the time of construction. Osmosis issues, if any, tend to show up 10 -15 years after construction though may show up sooner or later. It is evidenced by blisters or bubbles on the inside surface of the pool. There may be only a few or many. They may be localised or all over the inside pool surface.

Such blisters can be a serious problem if left unattended. At some point, your pool may need extensive repair, including gelcoat removal and a new fibreglass liner.

However, if you have isolated blisters and a manageable number to repair individually, we often recommend that you patch individual blisters and continue to use the pool until you determine the cause and extent of the problem.

### Isolated or early stage blisters

The causes and seriousness of blister problems vary, influenced by such factors as the quality of the resin used, the quality of the laminating equipment, and the workmanship. Pool model, age, climate are other important factors. Blisters typically develop slowly. A small number of blisters may be the total extent of your problem or the first sign of something much more serious. It may take two or three years of careful monitoring and repairing gelcoat blisters to determine the severity of your problems and decide on the most effective long-term repair strategy.

Gelcoat blisters are best identified immediately after the pool is emptied of water. If you wait, even an hour or two, fewer blisters may be seen because blisters often deflate over time. The damage is there, just more difficult to identify.

Depending on the factors that cause blisters in your particular pool, one of the following may apply:

- Repairing isolated blisters may solve your problem.
- Repairing isolated blisters from time to time and keeping an eye on further developments, if any.
- Repairing isolated blisters may only slow the advancement of blisters and postpone an extensive repair.
- Have a whole new Fibreglass liner installed in your pool as a long term answer.

See our web site for more information:

[www.poolpaint.com.au](http://www.poolpaint.com.au)

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