



# Swimming Pool Luminaires and Saltwater Pools

*UL engineers answer questions concerning UL and its operations, UL Standards for Safety, product certifications, and the code applications for which products are certified.*

## **Are swimming pool luminaires listed for use in saltwater pools? If so, how can these be identified?**

The first step in answering this question is to define what is meant by saltwater pools. This may be confusing because some chlorine or bromine generators use salt as an input ingredient. UL has determined that the salt levels used by these generators result in treated water that has a conductivity similar to fresh water. In comparison, seawater has a much higher natural salt concentration and, hence, a much higher conductivity.

Accordingly, swimming pool luminaires intended for use in seawater installations are subjected to an electric shock test that uses water with conductivity representative of seawater, which is more conductive than the water used in the freshwater luminaire tests.

Therefore, luminaires intended for use in swimming pools filled with tap (municipal) or well water, including water that has been salt-treated for chlorine or bromine generation, are marked as suitable for fresh water. Luminaires intended for use in swimming pools filled with seawater are marked as suitable for seawater. Luminaires that have been evaluated for both applications are marked for both.

Swimming pool luminaires are investigated in accordance with the requirements in UL 676, the Standard for Safety for Underwater Luminaires and Submersible Junction Boxes. These products are Listed under the Swimming Pool and Spa Equipment, Luminaires and Forming Shell (WBBD) product category, which can be found in the Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database).



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