

Water Chemistry Chlorine

Sodium Dichlor Granular Chlorine

Dichlor is the only packaged chlorine form suited for spas. It is primarily recommended as an occasional shock, since it is not available in tablet form, as bromine is. It is neither excessively acid nor alkaline in character, and does not quickly deplete at higher water temperatures. If you use dichlor, the quick-dissolving fine granular formulation is the best. Avoid the large pellets as they take too long to dissolve, and any particles resting on the spa bottom can cause finish damage. Since Dichlor is not made in tablet form, if you choose to use it as a sanitizer, more frequent doses and testing will be required

It is best to dissolve dichlor in a bucket of clean water first, and then add to spa water. (Pouring granules directly into a spa can sometimes cause acrylic surface discoloration from direct contact).

Never mix different spa chemicals together; always add them one at a time.

Salt Water Chlorine Generators



Swimming pool owners have enjoyed the many benefits of saltwater purification systems for years. Saltwater chlorine generators are now available as easy to install plug-in systems for hot tubs with only minor modifications, which automatically produces pure chlorine from mineral salts. The only downside is that your spa water will be salty as with seawater

Tricolor (*pool tabs*)

A form of chlorine, is excellent for pool water treatment, and is usually supplied as tablets. We do not recommend this type of chlorine for spas as an everyday sanitiser because it has a higher acidic nature, and generally dissolves too slowly to be effective. Prolonged contact with the spa shell can result in bleaching of the color and may even mark it, sometimes causing a permanent ring at the water line degrading pillows and other hardware.

Cal-hypo (*calcium hypochlorite*)

This type of chlorine is popular for pool use because it's relatively cheap. Due to its calcium component it tends to form deposits on spa heater parts and plumbing fittings, and

may also leave an unattractive film or ring at the hot tub's water line. Avoid it in spas-- if you are going to use chlorine, sodium dichlor is well worth the few extra pennies in weekly cost.

Sodium Hypochlorite (*household bleach*)

Do yourself a favor, and keep household bleach away from your spa! Not only is bleach a poor sanitizer at higher water temperatures, it readily affects pH balance and tends to have a much harsher chlorine odor.

Avoid household bleach!



Household bleach can easily splash on surrounding surfaces, including your spa cover, and may cause permanent damage. Bleach also reduces filter life when used for cleaning.

Understanding Free, Combined, and Total Chlorine

Chlorine in spa & pool spa water may be present in two forms. First, Free Chlorine does the job of killing bacteria and oxidizing contaminants. When you add chlorine to the water, you are adding Free Chlorine. When the Free Chlorine reacts with contaminants such as oils, bacteria and other organics, it becomes combined chlorine, or chloramines. Unlike combined bromine, combined chlorine has little sanitizing ability, and no oxidizing ability. Chloramines also have an irritating odor. Combined chlorine is like a spent bullet. Chloramines have a harsh odor, and can cause red eyes and irritation. (You'll have less chance of these problems if using bromine and can avoid them altogether with an [alternative sanitizer](#)).

Combined Chlorine + Free Chlorine = Total Chlorine

Therefore, if the total chlorine level is higher than free chlorine, that indicates the presence of combined chlorine. In that case you need to shock or superchlorinate your pool or spa. Shocking with non-chlorine MPS shock, or dichlor in an extra large dose will actually oxidize the combined chlorine and destroy the chloramines. You can test and measure Free and Total Chlorine with a variety of test strips or reagent products.