

Swimming Pool Water Chemistry Troubleshooting Guide

Problem	Symptom	Cause	Remedy
Green Water	Green Color	Algae Corrosion of Copper	Adjust pH, shock treat with shock treatment. Repeat if necessary. Follow remedies for colored water and corrosion of metal parts.
Corrosion of Metal Parts	Metal fixtures in contact with pool water being eaten away; rust stains; copper stains; colored water	Low pH and/or Low alkalinity and/or Low Calcium hardness	Adjust pH to 7.2-7.6 by adding pH plus. Raise alkalinity to 60-100 ppm if using granular and 90-125 ppm if using chlorine tablets or sticks. Raise calcium hardness to minimum of 200 ppm by adding calcium plus. Follow label instructions
Chlorine Odor	Swimmers' eyes become irritated, water has an unpleasant odor, complaints of too much chlorine in the water	Chloramines formed by reaction with bathers waste	Adjust pH to 7.2-7.4 shock treat with shock treatment. Repeat if necessary.
Eye and Skin Irritation	Red eyes, itching eyes	Chloramines (See chlorine odor); Improper pH	Adjust pH, shock treat with shock treatment. Readjust pH with pH plus (soda ash) or pH minus (dry acid) or muriatic acid to 7.2-7.6 range
Algae	Green or brown algae turn water green, pool surfaces feel slippery, can also cause cloudy water. Black algae forms patches on pool sides, giving them a spotty look.	Insufficient Chlorine High stabilizer level. Improper pH	Adjust pH, shock treat with shock treatment. Vinyl liner: Use soft nylon brush. Repeat if necessary. Add algaecide. Follow dosage recommended on label.
Scale Formation	Scale on pool walls and fixtures. Frequent in new inground pools.	High pH, excess alkalinity. Excess calcium hardness	Reduce pH to 7.2- 7.6 with pH minus or muriatic acid. Use pH minus or muriatic acid to reduce total alkalinity to 60-100 ppm if using chlorine granular. 90-125ppm if using chlorine tablets or sticks depending on pH and calcium hardness. Lower calcium hardness if necessary by draining water and replacing it with water having a lower hardness
Colored Water	Brown, Black, Blue-green water	Iron, Manganese, copper in excess	Shock treat with shock treatment. Floc pool or sand filter with alum (not recommended for D.E. or cartridge filters). Follow remedy for corrosion of metal parts. To prevent colored water, use stain and scale controller. Follow instructions
Excessive Available Chlorine	Bleached hair and bathing suits. Possible eye irritation.	Excess Chlorine	Add sodium sulfite or sodium bisulfite or sodium thiosulfite
Cloudy Water	Hazy, cloudy water, lack of sparkle	Early alge growth Pool Filtration High pH High Alkalinity	Adjust pH to 7.2-7.4 shock treat with shock treatment. Check filter operation. Readjust pH with pH minus or muriatic acid to 7.2-7.6. Add clarifier to aid filter in removal of fine suspended particles. Follow instructions

