Bleaching of Liners

AlkorPlan

RENOLIT

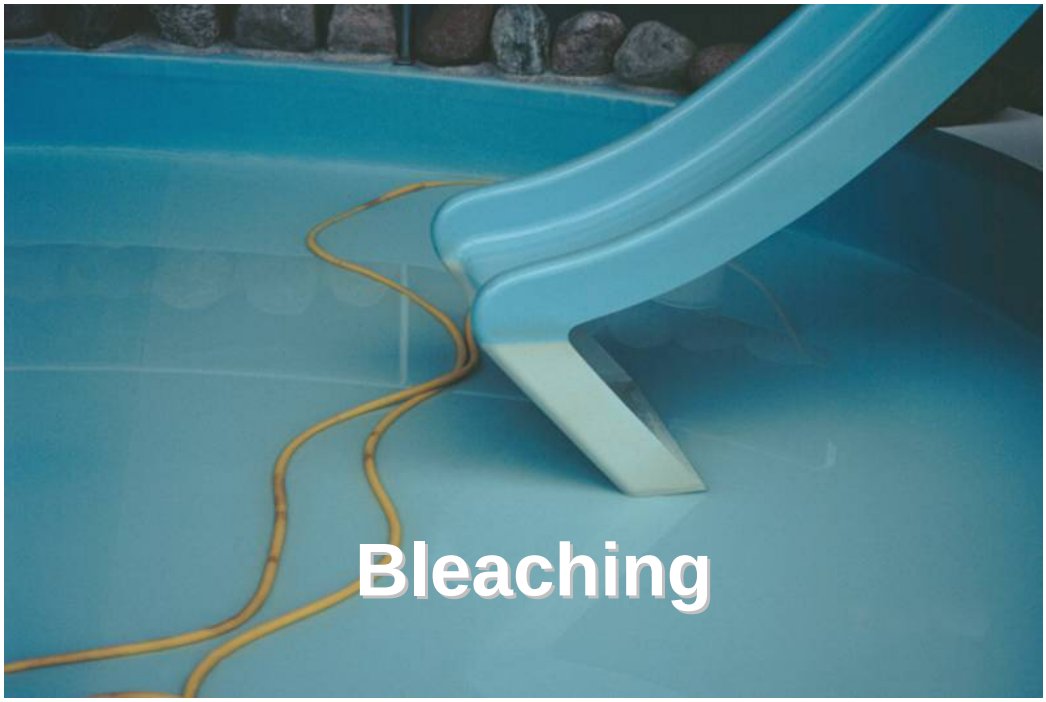
Rely on it.

UK Sales:
John Bartlett
Tel: 07831 254216
jb@jbinlimbo.co.uk

RENOLIT Ibérica, S.A. Sociedad Unipersonal
Carretera del Montenegre, s/n 08470 Sant Celoni (Barcelona)
Tel: 0034 93 848 40 00 Fax: 0034 93 867 30 51
www.renolit.com

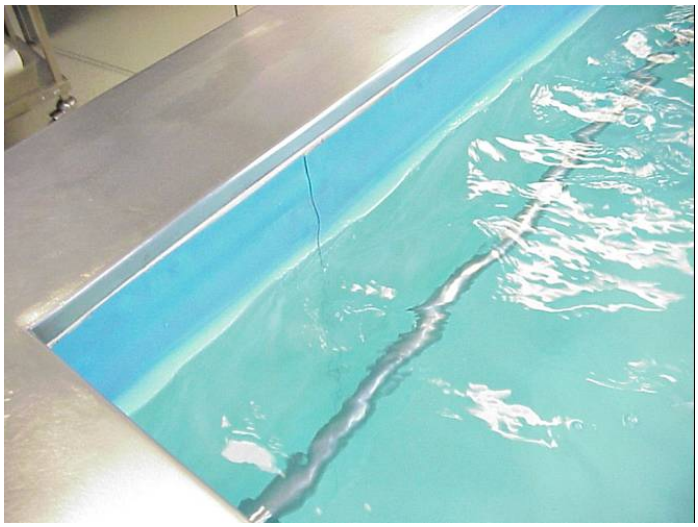
Inscrita en el Registro
Mercantil de Barcelona
Hoja B-68100, Tomo 38758,
Folio 31, N.I.F.A-08058943

Bleaching of Liners 2



Most blue and black pigments are sensitive to the oxidizing effect of chlorine. The process of bleaching depends on the temperature, pH value and chlorine level of the pool water, and on the presence of isocyanuric acid stabilizer.

Dark colours are more sensitive to bleaching than light colours.



AlkorPlan

RENOLIT

Rely on it.

Bleaching of Liners 3

The following recommendations are a guide to keeping bleaching and fading to a minimum.

Private, outdoor swimming pools are usually only operated during the summer months. Water temperature will be some 25-28ºC, with perhaps short peaks up to 32ºC.

These pools are often treated with 1 to 2 tablets (depending on the temperature) of 200 grammes of slowly dissolving trichloro-isocyanuric acid per 50 m3 per week. This generates a stabilised chlorine level of 0.7-1.2 ppm. Regular filter backwashing and a yearly partial replacement of the pool water with fresh water, will maintain isocyanuric acid stabilizer level at about 30-70 ppm.

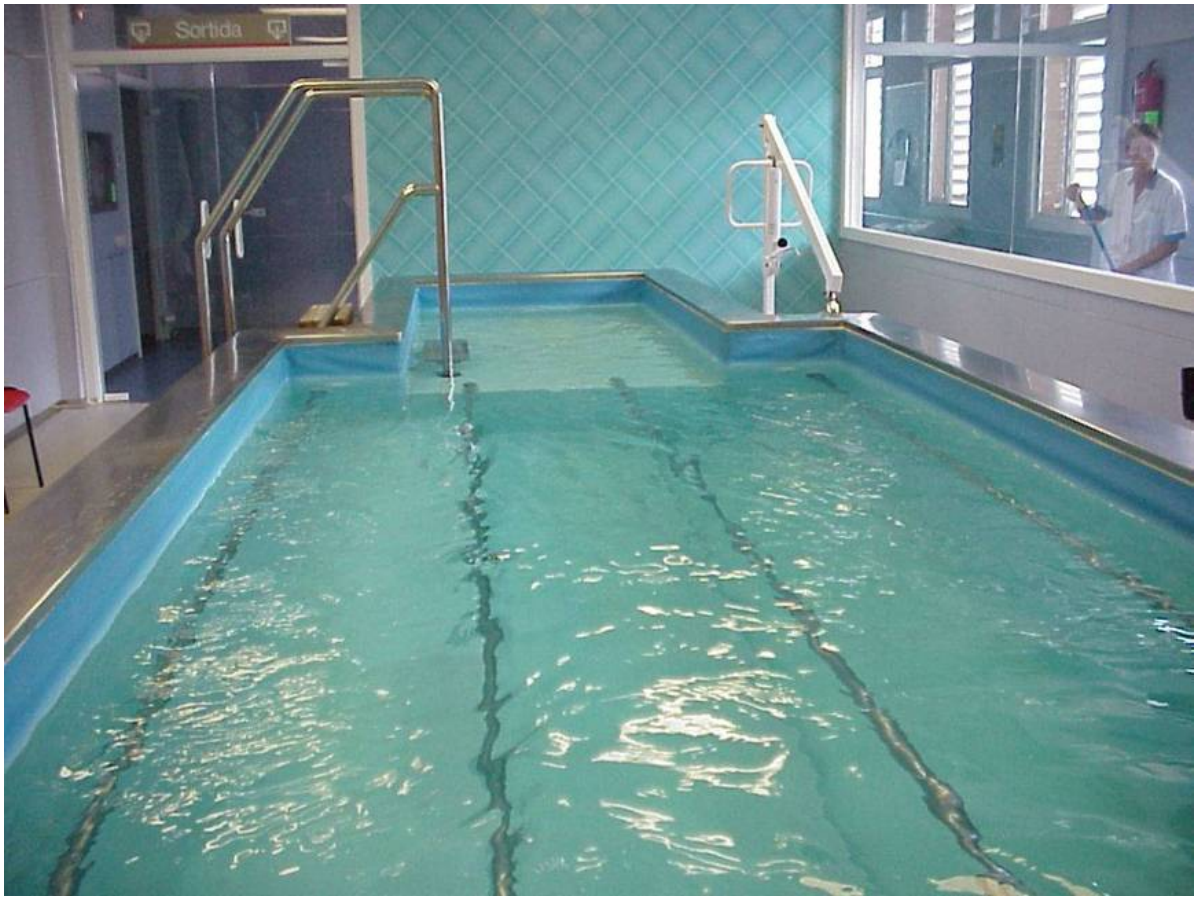
As the chlorine is stabilized, pH can be allowed to fluctuate between 6.8 and 7.6.

Salt electrolysis or automatic dosing of a sodium hypochlorite solution will bring unstabilized chlorine into the swimming pool water. pH should be maintained at 7.2-7.6 and chlorine levels should be kept as low as 0.4-0.7 ppm, unless some stabilizer (e.g. 20 ppm) has been added manually to the pool water.

With automatic regulation, an ORP (oxidation-reduction potential) of about 650/750 mV (low/high bathing load) should be targeted.

Bleaching of Liners 4

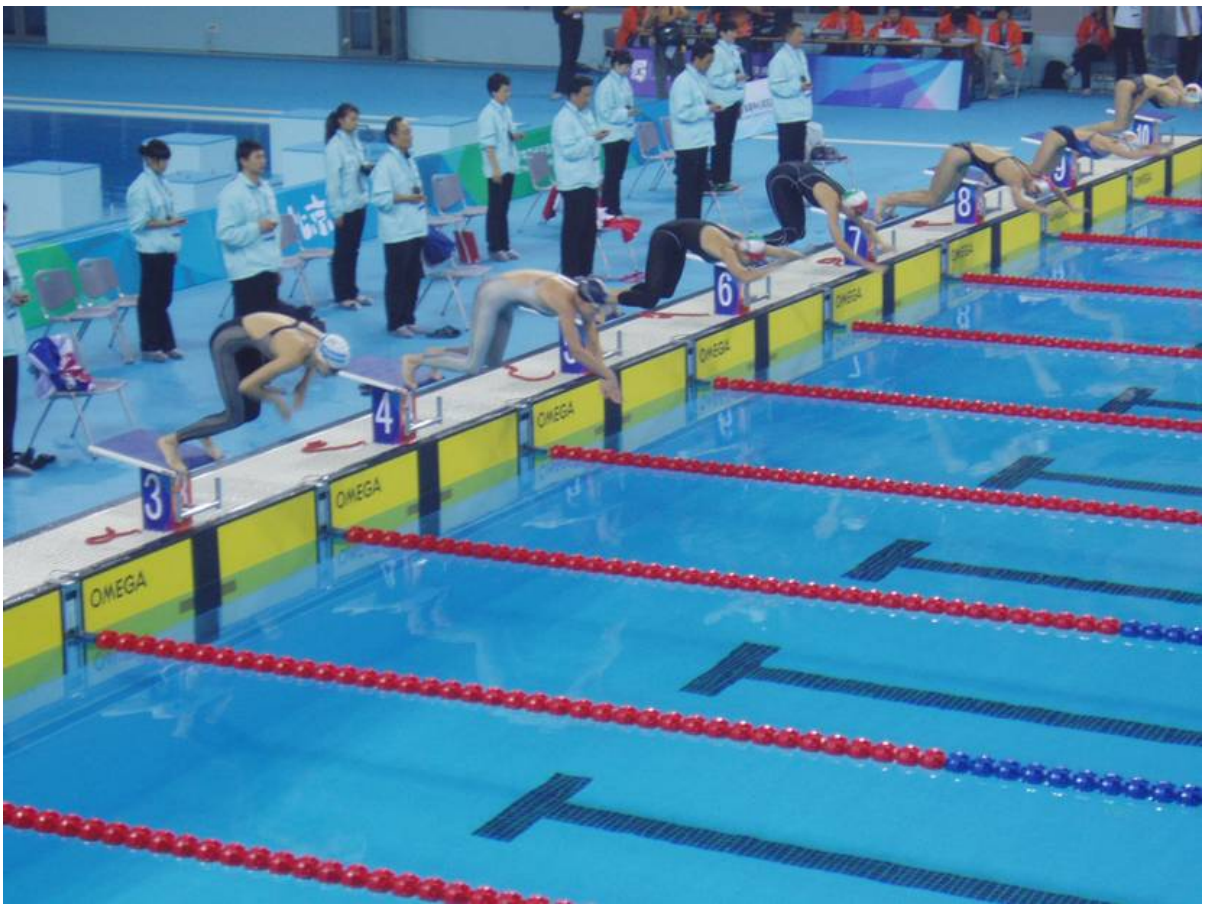
Indoor pools are often operated at quite a high temperature (28-35ºC). In order to avoid algae and bacterial growth, such temperatures require higher chlorine levels : typically some 0.8-1.5 ppm of unstabilized chlorine. As these pools are normally also operated all year round the waterproofing membrane will age more quickly. Under these conditions, it is more appropriate to choose a colour that is not too sensitive to bleaching. White or Ice Blue are the colours usually recommended.



Bleaching of Liners 5

Public pools are operated according to local legislation. The water temperature is generally not very high (typically 27ºC), which means that high chlorine levels are not required. Much depends however on the quality of water circulation in the pool. If the water circulation is poor or uneven then the water feeding into the pool would have to be over-chlorinated - probably as high as 3ppm - for all parts of the pool to be adequately protected, this could accelerate bleaching.

Conversely, with a good water circulation pattern, residual chlorine level (the chlorine level in the water that is returning to the pump) can be kept as low as 0.3 ppm



Care should be taken not to put concentrated or aggressive chemicals in direct contact with the swimming pool membrane.

Cases of such aggression have been known to occur when slow-dissolving chlorine tablets are put in the skimmer basket during the winterisation period. If the circulation pump isn't working on a regular basis, a concentrated chlorine solution will be created that can enter the pool through the bottom outlet. With no circulation of the pool water, this concentration will sit on the floor of the pool around the outlet and can cause bleaching and wrinkling of the liner. Floors of hoppers are particularly susceptible to this problem.