



maintenance ^{of your} reinforced pool membrane

.....
care instructions for commercial
& private swimming pools

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 **ELBE®**

POOL SURFACE | MADE IN GERMANY





1. the water



2. pH value



3. acid capacity



4. chlorine value



5. water temperature



6. water treatment



7. water contamination



8. cleaning products



9. cleaning equipment



10. swimming pool covering



11. heat warning



12. preparing the pool for winter



13. contact reactions



THE WATER

Water from your city water system – in other words, drinking water – is perfectly fine for filling your pool.

If you use well water you should ensure that it does not contain heavy metals, such as iron, copper and manganese. These metals can cause discoloration of the membrane.

In areas where there is a high concentration of calcium (hard water), you should use chemicals to reduce lime and calcium in the pool water. If not, it is going to damage the surface of the membrane.

RECOMMENDED PH VALUE:

from 7.0 to 7.6

If the pH value is less than 7.0:

- metal parts of the pool system may corrode
- the membrane will age faster
- wrinkles may form on the surface of the membrane

If the pH value is more than 7.6:

- the chlorine will break down faster
- disinfectant effectiveness is reduced
- calcium deposits will occur on the membrane





ACID CAPACITY / ALKALINITY

One of the parameters to control for good maintenance of the pool water is the total alkalinity. This is because alkalinity is closely linked to pH. If ignored it can cause problems when trying to balance the pH.

Acid capacity, alkalinity, total alkalinity, bicarbonate hardness are identical terms.

The acid capacity is basically determined by the hydrogen carbonate ions (HCO_3^-) dissolved in the poolwater. Alkalinity has an important role as a regulating effect on pH changes (buffer effect), making it impossible to have water in perfect conditions of transparency and disinfection if its total alkalinity is not correctly adjusted. So, a minimum value of acid capacity is necessary for the pool water.

Water with a low acid capacity causes strong pH fluctuations.

acid capacity

Adjusting the pH value by dosing acids or alkalis is difficult or even impossible. On the contrary, if the acid capacity is too high, it is also difficult to set the desired pH value as the water is "over-buffered".

The recommended alkalinity is between 80 – 120 ppm.

Incorrect pH values, in other words, if the pH values are too high or too low, this usually leads to faster ageing of the product.

Indications of these are:

- bleaching out
- rough surface
- wrinkling due to expansion (increased water absorption)

If the alkalinity is **less than 80 ppm** skin and eye irritation for bathers can occur as well as corrosion of the metal parts of the pool, and excessive consumption of disinfectant due to water imbalance. **If the alkalinity is too high** it can cause limescale deposits.





Cl

RECOMMENDED CHLORINE VALUE:

From 1 to 3 ppm (mg/l) for stabilized chlorine, such as powder or tablets

From 0.3 to 1.5 ppm (mg/l) for non-stabilized chlorine, such as a salt chlorinator or liquid chlorine

Too little chlorine content:

- disinfectants not efficient
- water quality deteriorates
- increased growth of biofilm on the membrane, eventually leading to discoloration

Too much chlorine content:

- wrinkles forming on the surface of the membrane
- fading/bleaching of the membrane
- accelerated aging of the membrane

chlorine
value

WATER TEMPERATURE

Please note the maximum water temperature of your fabric-reinforced swimming pool liners according to the data sheet.

If the temperature is too high:

- disinfectant effectiveness will be clearly reduced
- need for higher chlorine level will increase the risk of membrane bleaching
- increased risk of bubbles and wrinkles forming





WATER TREATMENT AND DISINFECTANT EQUIPMENT

Do not use copper or silver ionizers, sometimes used to kill algae, to disinfect the water. These systems are not suitable for the pool membrane and can cause discoloration.

If copper or silver is present in the water, you need to remove it using a pool balancer.

WATER CONTAMINATION

Avoid contamination of the water by showering before swimming and using approved, mild cleaning agents on the pool edge regularly.

NOTE: Sun screens, lotions, tanning oils unite with the metal ions present in water (e.g. iron and copper) and contribute to discoloration and stains along the water line. It is important to maintain the pool membrane always clean on the water line using a product designed for the cleaning of vinyl lining on the water line. Consult your local pool dealer.





CLEANING PRODUCTS

Only use non-abrasive cleaners designed specifically and approved for swimming pools.

Normal industrial or household cleaning products (for instance detergent powder or liquid chemical to remove oil or grease) are not approved for pools and they should not be used. They will damage the swimming pool membrane.

CLEANING EQUIPMENT

Use only soft cloths, brushes and sponges for cleaning. Scouring powders, wire brushes or high-pressure cleaners can potentially scratch or harm the membrane surface.





CAUTION WHEN COVERING THE SWIMMING POOL

Covering the swimming pool has important effect on the water. Temperature can overpass quickly the maximum level to avoid damage on the pool membrane. Moreover, without any circulation of the pool water, the reactivity (or aggressivity) of chemicals inside the water is increasing very fast and can also reach high levels which will harm the pool membrane.

When the swimming pool is covered, it is important to:

- check the water temperature
- check the level of chlorine in the water: from 1 to 3 ppm (mg/l) for stabilized chlorine, and from 0.3 to 1.5 ppm (mg/l) maximum level for non-stabilized chlorine
- do not keep the water without recirculation more than 1 hour in order to avoid stagnant water with accumulation of heat and chemicals in certain areas (around the skimmers, the main drains, the corners, etc.)

heat warning

WARNING!

Accumulation of heat in the air and water will damage the membrane.

Insufficient circulation of pool water will cause extreme warmth under the cover and will permanently damage the membrane. The air temperature can exceed 60 °C, and the water temperature can exceed 40 °C.





PREPARING THE POOL FOR WINTER

- lower the water level just below the skimmer
- winterize inlets on return lines by closing them tightly
- empty all plumbing lines and drain the filter
- adds floats to the water to protect the membrane from ice damage
- if your pool system is to be stopped, cover the pool with a UV protected cover

Winterizing the swimming pool means protect the membrane against:

- the pollution and contamination present in the air
- the action of the UV rays

By following these steps, you will avoid damaging the membrane.

AVOID CONTACT WITH SOME MATERIALS

Some material can lead to stains or discoloration if they come into contact with the pool membrane.

Remove organic and non-organic debris from the pool early.

Avoid the direct contact with polystyrene, bitumen, tar, industrial oils and grease, solvents, coating material or paints, or rubber (sole of shoes or boots, cables, pipes, etc.)





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REINFORCED POOL MEMBRANE

Please consult your swimming pool installer if you have any questions about these maintenance topics. Inadequate maintenance and care of the pool can lead to permanent damage to the pool membrane, such as wrinkling, discoloration, bleaching, fading, scratches or accelerated aging.

Pool maintenance always includes the care of your swimming pool membrane!







Elbtal Plastics GmbH & Co. KG
Cowaplast 2
01640 Coswig | Germany

+49 3523 5330-0
info@elbtal-plastics.de

www.elbtal-plastics.de
www.ELBEpools.com

