

# PoolSan<sup>®</sup>

100% Chlorine Free Swimming

## How to set up and maintain your PoolSan pool & spa

*Quick  
Reference  
Guide*

## What is PoolSan?

PoolSan is a safe to handle and easy to use liquid that replaces traditional chlorine in swimming pools and spas. PoolSan cleans using ionisation; put simply, PoolSan is ionisation in a bottle. Rather than being produced slowly on site by a traditional ionising system, the ions are mass-produced during the PoolSan manufacturing process. The unique blend of ions is then locked into a solution to form PoolSan, an innovative, easy to dose, completely chlorine-free liquid sanitiser. Because the ions are in a liquid form they can be added quickly and easily by hand or by an automated dosing system as demand requires.

The science behind PoolSan is well known – ionisation is a long established and effective water treatment used in hospitals, watercooling towers and treatment plants worldwide. What makes PoolSan so exciting is how it delivers this science to pools and spas; it is easily dosed as a liquid, added just as chlorine is when the bather load demands it. Every pool and spa user notices the improvement in their water once they change to PoolSan - a typical comment is that the pool has never looked or felt better. The environment in and around a PoolSan pool quite simply cannot be matched by any other water treatment.

PoolSan is a sustainable and safe alternative to chlorine, bromine, UV and ozone, which is easy to use, odourless, tasteless, kind to eyes, skin, hair and your pool & spa!



## How to set up your PoolSan pool & spa

- Calculate the volume of water in the pool/spa so you have a guide to how much product to dose.\*
- Check the pH of the water and adjust to between 7.0 and 7.6 with a target of 7.2 to 7.4.
- Check Total Alkalinity (TA) level of the water and adjust to between 80 - 120 ppm(mg/l).
- Check Calcium Hardness (CH) level of the water and adjust to between 250 – 500 ppm(mg/l).
- Check copper level using the PoolSan 3in1 Test Kit as copper may already be present in the incoming water or pool/spa water via a pre dosed algicide.
- Having checked for copper in the water add PoolSan as per the dosage guidelines, less is best so add gradually, you can always add some more!
- Oxygen (residual chlorine) may already be present in the pool/spa water so test first using the PoolSan 3in1 Test Kit. Only add PoolSan Regenerator as a shock treatment for domestic pools/spas to keep the water sparkling clean. NB: when shock dosing always add the PoolSan Regenerator first before adding any additional PoolSan, the Regenerator re-activates the mineral ions, so you will see an increase in the copper reading.

## How to maintain your PoolSan pool & spa

- Check pH, TA and CH and adjust if necessary by using pH+ (Sodium Carbonate), pH- (Sodium Bisulphate), TA+ (Sodium Bicarbonate) and CH+ (Calcium Chloride).
- If the pool/spa water is looking milky & cloudy following high bather loads shock dose with PoolSan Regenerator.
- Check copper and add PoolSan if necessary. NB: Always check and add PoolSan following a shock dose of PoolSan Regenerator.
- Check filter pressure and backwash if necessary.

## \* Calculate the volume of water in the pool/spa

Length x Breadth x Average Depth = volume of water.

Average depth is calculated by (depth in the shallow end + depth in the deep end) divided by 2.

### Example:

Length 18 mtrs x Breadth 8 mtrs. Depth in the shallow end 1 mtr + depth in the deep end 2 mtrs, therefore average depth = (1mtr + 2 mtrs) divide by 2 = 1.5 mtrs.

Therefore volume =  $18 \times 8 \times 1.5 = 216$  cubic meters = 216,000 litres.

The same formula can be used for any size pool.

## Using the PoolSan 3in1 Test Kit:

### pH

Optimal PoolSan performance is between pH of 7.0 and 7.6 with a target of 7.2 to 7.4.

### Copper level

Optimal PoolSan performance is between 0.4 & 0.8 ppm(mg/l) copper with a target of 0.5 to 0.6 ppm(mg/l).

### Oxygen level

Optimal PoolSan performance is between 3.0 & 8.0 ppm(mg/l) oxygen with a target of 5.0 to 6.0 ppm(mg/l) when shock dosing.



## Adjusting pH

### To decrease / increase pH

Add 120 grams of pH-/pH+ per 10,000 litres of water to achieve a drop / rise of 0.2.

Apply the required amount of PoolSan pH- / pH+ by pre-dissolving the product in a clean container with clean water.

### Note.

Always add chemical to water and not water to chemical. Never mix pH- and pH+ together.

Pour the solution all around the pool/spa and keep the pump running to allow circulation of water.

Wait for a minimum of two hours then re check pH level. Repeat if necessary.

Allow one hour after application of this product before swimming.

Dosage levels are only a guide. Regularly test pool/spa water.



## Adding PoolSan

Apply the required amount of PoolSan as per the dosage tables opposite by pouring half the required dose directly into the skimmer box and the balance around the pool/spa perimeter (or pour the full dose into the skimmer box) and keep the pump running to allow re-circulation.

The second table shows the approximate amount of PoolSan required to raise the copper level by 0.1 ppm(mg/l). Dosage levels are only a guide. Regularly test pool/spa water.

As a guide when the 3in1 Test Kit shows less than 0.4 ppm(mg/l) of copper add a quarter to a half of the initial dosage. The maximum level of copper should not exceed 0.8 ppm(mg/l).

Remember less is best with PoolSan, it doesn't dissipate the way chlorine does, so you end up using less!

## PoolSan Regenerator

PoolSan Regenerator can be dosed directly into the pool water.

It should be used when bathing has ceased, bathing can resume 15 minutes after application. The dose rate is 200 grams of PoolSan Regenerator to 10,000 litres of pool water. Dose into the pool where there is good water movement or evenly over the surface of the water. Dose once a week when the pool is in use or once every four weeks when the pool is not in use. High volume bather pools/spas may need to be shock dosed more frequently. This can be checked by testing oxygen levels which should be between 3.0 to 8.0 ppm(mg/l). If the pool/spa water is looking milky & cloudy or even green, shock dose with PoolSan Regenerator.

Dosage levels are only a guide. Regularly test pool/spa water.

### PoolSan volumes

25,000 litres	= initial dose 320ml
30,000 litres	= initial dose 380ml
60,000 litres	= initial dose 760ml
90,000 litres	= initial dose 1.15 litres

### PoolSan volumes

25,000 litres	= PoolSan dose 50ml
30,000 litres	= PoolSan dose 60ml
60,000 litres	= PoolSan dose 120ml
90,000 litres	= PoolSan dose 180ml



### PoolSan Regenerator volumes

25,000 litres	= initial dose 500g
30,000 litres	= initial dose 600g
50,000 litres	= initial dose 1 kg
90,000 litres	= initial dose 1.8 kg



# Domestic Pool Treatment Log

Month	Date:				
	Week 1	Week 2	Week 3	Week 4	Week 5
ph					
Oxygen					
Copper					
pH+/pH-added					
TA+ and CH+ added					
Regenerator added					
PoolSan added					
Comments					

pH levels 7.0 - 7.6 (target 7.2 to 7.4)

Oxygen levels 3.0 – 8.0 ppm(mg/l) (target 6.0ppm(mg/l) when shock dosing)

Copper levels 0.4 – 0.8 ppm(mg/l) (target 0.5 – 0.6 ppm(mg/l))

# Troubleshooting

Problem	Cause	Remedy
Water is green & cloudy	Algae growth	<ul style="list-style-type: none"> <li>• If necessary check and adjust pH</li> <li>• Check &amp; adjust PoolSan</li> <li>• Shock treat with Regenerator</li> <li>• Keep filter running</li> </ul>
Sides of pool are Slippery	Algae growth	<ul style="list-style-type: none"> <li>• As above</li> </ul>
Water is milky & cloudy	Organic pollutants/bather waste  Hard Water	<ul style="list-style-type: none"> <li>• As above</li> </ul>
Corrosion	pH value too low	<ul style="list-style-type: none"> <li>• Adjust pH value</li> </ul>
Blue/Green stains on pool liner, costumes and hair	Severe overdose of PoolSan and high or low pH and/ or TA	<ul style="list-style-type: none"> <li>• Adjust pH value to 7.0 (Stains will gradually disappear after approx 1 week in pool)</li> <li>• Shock treat with Regenerator</li> <li>• Do not add PoolSan until copper test reads 0.4 mg/l (ppm)</li> <li>• Rinse stained costumes in dilute solution of vinegar or lemon juice. Then wash normally.</li> <li>• Rinse hair with any shampoo containing Sodium EDTA, such as Head &amp; Shoulders or Paul Mitchell Clarifying</li> </ul>



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