

SpaGuard Spa Lite is a unique product formulated to make spa water sparkling, crystal clear and comfortable for bathers. Regular use of Spa Lite will oxidise bather wastes, remove irritating chloramines, add water-enhancing buffers and cleanse spa water of particulates and organics.

Background

Over time, spa water accumulates waste material which results in a dull, cloudy appearance. This waste can also make water irritating to the bathers and lead to unwanted bacterial and algal problems by providing nutrients and reducing chlorine effectiveness. The waste material, which is incapable of being filtered, is primarily introduced by bathers. Other possible sources are animals, insects, pollutants and the general environment. This waste causes the following problems:

- Dull, Cloudy Water. Caused by a build-up of non-filterable waste such as perspiration, cosmetics, suntan lotions, hair spray, pollutants, dead skin, etc. These accumulate in spa water due to water temperatures and bather-to-water volume ratios far in excess of most swimming pools. When used on a weekly basis or immediately after heavy use, Spa Lite oxidises this material so it is not allowed to accumulate to a point where water quality is affected. In addition, Spa Lite has chlorine-tolerant clarifiers which provide extended water clarity benefits by assisting the filtration system in removing organic waste and particulates.
- Irritating Water. The accumulation of bather wastes, besides making water cloudy and dull, contains nitrogen which reacts with chlorine to form chloramines. These compounds are irritating to bathers, causing eye and skin irritation, and the pungent "chlorine" odour often associated inappropriately with too much chlorine. Chloramines are also poor at killing and controlling bacteria, resulting in unacceptable water quality. Spa Lite removes chloramines through its unique formulation of multiple oxidisers, maintaining spa water comfort and clarity.

When used regularly, Spa Lite rids spa water of non-filterable wastes to restore water sparkle and removes chloramines to control odours and water comfort for spa water management that is easy and effective.

Product Description

Spa Lite is a pH-neutral, totally soluble, fast dissolving, granular material which comes in a pre-measured bag for easy application. When applied to spa water at the rate of one 50-gram bag for every 2,000 litres, the unique combination of oxidisers generate energy in the form of heat, effectively removing the undesirable matter present. This process is referred to as "Breakpoint Oxidation". To create the required amount of energy in the water, the product must be added according to the dosage rates.

When breakpoint oxidation is achieved, non-filterable wastes are reduced to microscopic ash, whilst chloramines are destroyed and any nitrogen liberated as a gas which can readily dissipate from the water. Spa Lite is unique in its ability to achieve this without increasing the sanitiser level in the water. This gentle approach to oxidation is preferable as it allows bathers to use the spa in a shorter period of time; a mere 15 minutes between treatment and use is generally all that is required.

Product Application

When used on a regular basis to maintain clarity and comfort, Spa Lite should be applied at the rate of 1 pouch per 2,000 litres at least once a week. Spas which are heavily used should

repeat Spa Lite treatment immediately after bathers exit. This ensures that the spa water will be cleansed rapidly and will be sparkling clean for the next use. Problems develop when spa water is left with an accumulation of bather wastes.

The above dosage rate and application guide for Spa Lite will ensure spa water stays sparkling, crystal clear and comfortable all the time by eliminating non-filterable wastes and chloramines before they cause problems. Apply the required amount of Spa Lite and wait 15 minutes before allowing the spa to be used. Always operate the pump and filter for a minimum of 1 hour immediately following application. Important: If a hard cover or solar blanket is used, leave it of the spa for a minimum of 1 hour to allow oxidation to proceed.

When applying Spa Lite, open the pouch and sprinkle the contents directly into the water. Pre-dissolving is not normally required, which makes application easy and convenient. Only pre-dissolve if water temperature is less than 20°C and the spa surface is a bleachable finish. Spa Lite is compatible and may be used with all SpaGuard sanitising products for maintaining crystal clear and comfortable spa water. Spa Lite will not affect spa water pH. Spa Lite is an oxidiser/clarifier only. It is not a sanitiser, disinfectant or algicide. Always use an approved sanitiser to maintain safe water. SpaGuard has a number of sanitisers approved for this use.

Effect on Stabiliser Levels

In Australia and New Zealand, there are regulatory restrictions existing on the use of stabilised chlorines in indoor environments. Given the authorities' views on sodium dichloroisocyanurate (dichlor) and trichloroisocyanuric acid (trichlor) products, coupled with queries that regularly come up at BioGuard workshops concerning Lite, this Technical Information Bulletin is a suitable medium to dispel the fears of massive cyanuric acid (stabiliser) buildup in spas treated

with Spa Lite. Given that the recommended dosage rate is 50 grams per 2,000 litres and that 60% of the product is dichlor, the concentration of dichlor being added to the spa will be $0.6 \times 50/2,000 = 0.015$ g/L or 15 ppm. As every 1 ppm of dichlor contributes 0.587 ppm of cyanuric acid, this equates to 8.8 ppm of stabiliser in the water. Spas must be emptied and fresh-filled every 6 to 8 weeks, so the maximum number of oxidations should never exceed 7 (Spa Lite should not be used to obtain a chlorine residual in a fresh fill). As such, the maximum concentration of cyanuric acid that can build up in the spa will be $7 \times 8.8 = 61.6$ ppm, well below the 100 ppm limit currently set for commercial outdoor pools and spas.

Summary of Spa Lite Benefits

- Easy application.
- No pre-dissolving.
- No pH adjustment.
- Pre-measured dosage.
- Improves bather comfort.
- Removes chloramines.
- Adds water enhancing agents.
- Soaking resumes in 15 minutes.
- Improves water clarity.
- Effective and economical.

The SpaGuard Spa Water Management System

1. Use a SpaGuard sanitiser in accordance with label directions to maintain 3.0 - 5.0 ppm of active sanitiser (chlorine or bromine) in water.

2. On a weekly basis or immediately after heavy use, apply Spa Lite at the rate of 1 bag per 2,000 litres by sprinkling evenly over spa water.

3. Use Optimiser Plus weekly to improve water comfort for bathers and improve clarity.

4. Properly balance spa water with Perfect Balance .

5. Follow proper maintenance techniques:

- Drain spa regularly and clean entire surface with SpaGuard Surface Cleaner.
- Clean filter cartridge regularly with Filter Brite.
- Use Polysheen Plus weekly.

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