

Dosing Guidelines for Liquid Lithium



1. Dosing Considerations

- Liquid Lithium dosing will be shown as a comparison to Dichlor in order to compare cost efficiency
- Since Liquid Lithium is so much more stable than Dichlor it only requires to be dosed once per 7 days (see Figure 1)
- Dichlor dosing rates have been sourced from product label
- Dichlor will take time to dissolve - Liquid Lithium will provide instantaneous sanitation

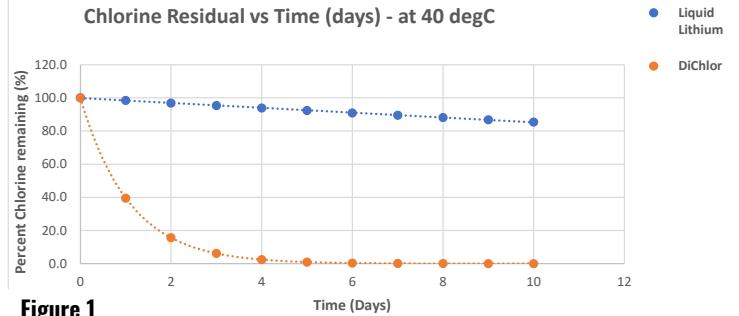


Figure 1

2. Recommended Dosing Rates - Comparison

Liquid Lithium – For 1000L Spa

Dosage	Amount (mls)	Frequency
Shock	4 x Daily Dose = 4 x 20 = 80 mls	At start only (once off)
Super Chlorination	2 x Daily Dose = 2 x 20 = 40 mls	Each Week
Routine	See Super Chlorination	See Super Chlorination
Weekly Total	40 mls	Each Week
One bottle lasts	= (1000-80)/40 = 23 weeks (161 days)	n/a

Dichlor – For 1000L Spa

Dosage	Amount (mls)	Frequency
Shock	3 x Daily Dose = 3 x 10g = 30 g	At start only (once off)
Super Chlorination	3 x Daily Dose = 3 x 10g = 30 g	Each Week
Routine	10g	Daily
Weekly Total	90g	Each Week
One bottle lasts	= (1000-30)/90 = 10.8 weeks (75 days)	n/a

3. Cost per Day - Comparison

Liquid Lithium:

RRP per 1L Bottle = \$50 (approx.)

Cost per Day = \$50/161 = \$0.31 per Day

Dichlor:

RRP per 1kg Bottle = \$30 (approx.)

Cost per Day = \$30/75 = \$0.40 per Day

4. Dosing Procedure – Liquid Lithium

- Owner/Technician needs to test the water for sanitiser concentration before each use & adjust if reqd.
- If a Chlorine based sanitiser is being used, the normal target concentration of available chlorine is 3 to 10 ppm.
- Formula to calculate volume of LL required:

$$\text{LL Dosage Volume (mls)} = \frac{(\text{Desired AC} - \text{Current AC}) \times \text{Spa Volume}}{90.91}$$

Where AC = Available Chlorine level (ppm), Spa Volume (L)

Dosing Procedure – Startup/Ongoing

1. Add CYA to 15ppm:
CYA Dose = 0.000015 * Spa Volume (in grams)
Add CYA to Spa
2. Use test strip to check current AC
Calculate Liquid Lithium Dosage + add to Spa
3. Test for Available Chlorine (AC) using test strip.
Adjust LL as required to achieve 3-5 ppm
4. If concrete spa then add Calcium Chloride to 100ppm
5. For Daily Dosing repeat Steps 2 & 3.