

Use Case	Approximate Calcium Hypochlorite Concentration (65-70% Available Chlorine)	Estimated Available Chlorine (ppm)	Typical Test Strip Ranges (ppm of Free or Total Chlorine)	Notes
Emergency Potable Water	<p>Make <b>STOCK</b> Solution: ~1 Tbsp per 2 gallons water</p> <p>Use 1 part <b>STOCK</b> to 100 parts water</p>	~50-100 ppm (in treated water)	0-10 ppm, 0-50 ppm, 0-100 ppm	Start with a lower concentration and test. Ensure at least 30 minutes contact time. The target is often around <b>1-4 ppm</b> free chlorine for safe drinking water after the contact time.
Cleaning & Disinfection				<i>Important:</i> Cleaning/disinfection often uses much higher concentrations than potable water treatment. Ensure your test strips are appropriate for these ranges. Rinse surfaces, especially food contact surfaces, after disinfection.
General Surface Disinfection	1-2 teaspoons per gallon of water	~200-400 ppm	0-200 ppm, 0-500 ppm	Test strips for sanitizing solutions are often in this range. Aim for the concentration needed for the specific disinfection task and dwell time.

## Key Takeaways for Using Test Strips:

- **Range Matters:** Choose test strips with a ppm range appropriate for your intended use. Using a low-range strip for a high-concentration solution will give an inaccurate, off-the-scale reading.
- **Read Immediately:** Compare the test strip color to the chart on the packaging immediately after the recommended waiting time (usually a few seconds).
- **Proper Storage:** Store test strips in a cool, dry place with the lid tightly closed to prevent moisture damage and ensure accuracy.
- **Expiration Dates:** Be aware of the expiration date of your test strips, as they can become less accurate over time.
- **"Free" vs. "Total" Chlorine:** Understand whether your test strips measure "free chlorine" (the active disinfecting form) or "total chlorine" (which includes combined chlorine and chloramines). For most disinfection purposes, free chlorine is the more important measurement.