

POOLS SCIENTIFIC POOL OPENING CHECKLIST

Seasonal Opening Protocol | Science-Based | PoolsScientific.com

HOW TO USE:

Complete all sections in order before the pool is cleared for use. Record actual readings. Keep completed checklists for your records.

1. EQUIPMENT INSPECTION

<input type="checkbox"/>	Remove and inspect winter cover <i>Tears, debris, algae underneath</i>	Result: _____
<input type="checkbox"/>	Inspect pump — housing, lid, O-ring <i>Cracks, worn seal, basket clear</i>	Result: _____
<input type="checkbox"/>	Check all unions and fittings <i>Freeze/thaw cracks — inspect carefully</i>	Result: _____
<input type="checkbox"/>	Inspect filter tank <i>Verify gauge reads 0 PSI with pump OFF</i>	Result: _____
<input type="checkbox"/>	Clean or replace filter media <i>Before start-up, before adding chemistry</i>	Result: _____
<input type="checkbox"/>	Visual inspect heater exchanger <i>Scale, corrosion, debris present?</i>	Result: _____
<input type="checkbox"/>	Fire test heater ignition <i>Confirm clean, consistent ignition cycle</i>	Result: _____
<input type="checkbox"/>	Verify all valves fully open <i>No partial closures restricting flow</i>	Result: _____
<input type="checkbox"/>	Inspect automation panel & wiring <i>Corrosion, loose connections, errors</i>	Result: _____
<input type="checkbox"/>	Inspect salt cell (salt pools) <i>Scale on plates — clean if needed</i>	Result: _____
<input type="checkbox"/>	Verify bonding wire continuity <i>All metal components bonded — SAFETY</i>	Result: _____
<input type="checkbox"/>	Prime pump and confirm flow <i>Listen for cavitation — check returns</i>	Result: _____

2. WATER LEVEL & INITIAL CONDITION

<input type="checkbox"/>	Fill to mid-skimmer level <i>Proper level for skimmer operation</i>	Result: _____
<input type="checkbox"/>	Assess water clarity and color <i>Clear / cloudy / green / black</i>	Result: _____
<input type="checkbox"/>	Run pump — verify circulation <i>All returns flowing, skimmer pulling</i>	Result: _____
<input type="checkbox"/>	Service filter if needed <i>Backwash or clean before chemistry</i>	Result: _____

3. SAFETY SYSTEMS — NON-NEGOTIABLE

<input type="checkbox"/>	Test all GFCI outlets at pad <i>Press test button — must trip instantly</i>	Result: _____
<input type="checkbox"/>	Verify pool drain covers secure <i>Anti-entrapment covers required by law</i>	Result: _____
<input type="checkbox"/>	Test SVRS if equipped <i>Safety vacuum release — verify operation</i>	Result: _____
<input type="checkbox"/>	Inspect fence and all gate hardware <i>Self-closing, self-latching — no exceptions</i>	Result: _____
<input type="checkbox"/>	Verify life safety equipment in place <i>Reaching pole and ring buoy accessible</i>	Result: _____
<input type="checkbox"/>	Check underwater + perimeter lights <i>All lights operational and sealed</i>	Result: _____

4. SANITIZATION & CHLORINE

FC minimum = CYA x 0.075 | At 0 ppm CYA: FC 0.5–2.0 ppm | Shock to breakpoint before pool is cleared for use

<input type="checkbox"/>	Test Free Chlorine (FC) <i>Must meet 7.5% Rule vs CYA level</i>	Result: _____
<input type="checkbox"/>	Test Combined Chlorine (CC) <i>CC above 0.5 ppm = shock required</i>	Result: _____
<input type="checkbox"/>	Calculate shock dose if needed <i>Raise FC by 10x current CC level</i>	Result: _____
<input type="checkbox"/>	Add shock if required <i>Cal-hypo or liquid chlorine — not trichlor</i>	Result: _____
<input type="checkbox"/>	Retest FC after 4–6 hours <i>Confirm FC holding — no unexplained loss</i>	Result: _____
<input type="checkbox"/>	Salt pool: test salt level <i>Target 3,000–3,200 ppm — digital meter</i>	Result: _____
<input type="checkbox"/>	Salt pool: set cell to 50% output <i>Adjust after 48-hour run cycle</i>	Result: _____
<input type="checkbox"/>	Salt pool: confirm cell producing <i>Test FC after 24 hrs to verify output</i>	Result: _____

5. WATER BALANCE — LSI

Adjust in this exact order: 1. Total Alkalinity → 2. pH → 3. Calcium Hardness | Calculate LSI before and after all adjustments.

<input type="checkbox"/>	Test Total Alkalinity (TA) <i>Non-salt pools: 80–100 ppm Salt pools: 60–80 ppm Adjust FIRST</i>	Result: _____
<input type="checkbox"/>	Adjust TA if needed <i>Sodium bicarb (up) / Muriatic acid (down)</i>	Result: _____
<input type="checkbox"/>	Test pH <i>Target 7.4–7.6 Adjust SECOND</i>	Result: _____
<input type="checkbox"/>	Adjust pH if needed <i>Soda ash (up) / Muriatic acid (down)</i>	Result: _____
<input type="checkbox"/>	Test Calcium Hardness (CH) <i>Target 200–300 ppm Adjust LAST</i>	Result: _____

<input type="checkbox"/>	Adjust CH if needed <i>Cal chloride (up) / Dilution only (down)</i>	Result: _____
<input type="checkbox"/>	Test CYA (Cyanuric Acid) <i>PS Standard: 0 ppm target Max 30 ppm</i>	Result: _____
<input type="checkbox"/>	Calculate LSI <i>Target -0.3 to +0.3 Pool Math app</i>	Result: _____
<input type="checkbox"/>	Confirm LSI in target range <i>Must be -0.3 to +0.3 before clearing pool</i>	Result: _____

6. FINAL VERIFICATION

<input type="checkbox"/>	Run full system — minimum 8 hours <i>All equipment operating normally</i>	Result: _____
<input type="checkbox"/>	Retest all chemistry after full cycle <i>Confirm balance holding after circulation</i>	Result: _____
<input type="checkbox"/>	Retest LSI — confirm in target range <i>Document final LSI result</i>	Result: _____
<input type="checkbox"/>	Document all readings and chemicals <i>Date, readings, products, volumes</i>	Result: _____
<input type="checkbox"/>	Advise client on wait period <i>Min 4 hrs after any chemical addition</i>	Result: _____

CHEMISTRY QUICK REFERENCE

pH	7.4–7.6
Total Alkalinity	Non-salt pools: 80–100 ppm Salt pools: 60–80 ppm
Calcium Hardness	200–300 ppm
CYA	0 ppm target 0–20 preferred 30 max 50 never exceeded
Free Chlorine	Always per 7.5% Rule (FC min = CYA x 0.075)
LSI Target	-0.3 to +0.3 Salt pools: aim for lower half

7.5% RULE — CYA TO FC MINIMUM:	
0 ppm CYA	→ FC 0.5–2.0 ppm (PS Standard)
10 ppm CYA	→ FC min 0.75 ppm
20 ppm CYA	→ FC min 1.5 ppm
30 ppm CYA	→ FC min 2.25 ppm (acceptable max)
50 ppm CYA	→ FC min 3.75 ppm (absolute ceiling — drain)

ADJUSTMENT CHEMICALS:
RAISE pH: Soda ash (fast) / Sodium bicarb (slow)
LOWER pH: Muriatic acid / Dry acid (NaHSO4)
RAISE TA: Sodium bicarbonate
LOWER TA: Muriatic acid (slow addition, pump off)
RAISE CH: Calcium chloride

OPENING SIGN-OFF

Technician: _____	Date Opened: _____
Pool / Client:	Final LSI: _____ pH: _____ FC: _____

_____ CYA: _____ TA: _____ CH: _____

Notes:
