taylor®

Test Strips for Pools and Spas

Engineered for Accuracy

INTRODUCTION

Borates are a multipurpose additive that have seen a recent resurgence in the pool and spa industry. Mainly known for stabilizing pH, borates also perform as an algaestat. When introduced to water they inhibit the growth of algae, and therefore reduce the amount of chlorine needed over-time. Their ability to buffer pH helps prevent a myriad of issues, sometimes brought on by pH swings, such as surface stains, dissolved metals, and scaling.

Due to the increase in popularity, Taylor developed a borate test that is as convenient as it is reliable—**borate test strips (S-1342).** There are 25 strips per bottle and they can detect borates from 0 to 100 parts per million. With superb color differentiation, we've made it easier than ever to distinguish the correct value when color matching. Our indicator bonds directly with borates in the sample, while other test strips in the market measure the pH shift caused by borates. With this method our strips are less affected by pH and alkalinity and, as a result, are less prone to interferences.

When trying to maintain healthy, balanced water, there are many factors to consider. Our new line of test strips also includes: **Pool (S-1331), Spa (S-1332), 7-Way (S-1335), Service Pro (S-1351),** and **Salt (S-1341)**. All our test strips have been engineered for accuracy and are a great option for low-cost, accurate testing.

The usefulness of borates is undeniable, but the additive will produce a "false-high" total alkalinity reading which will need to be accounted for. Like cyanuric acid, borates' affect on total alkalinity will need to be considered when calculating water's saturation index. Follow the formula below to find the true carbonate alkalinity value (this adjustment is pH dependent).

BORATE CORRECTION TO TOTAL ALKALINITY

Total Alkalinity results can be corrected for the presence of borate by the following procedure.

1. Select a borate factor (B*f*) based on measured pH:

2. Calculate the carbonate alkalinity (Alk_C) from the measured total alkalinity (Alk_{TA}), measured borate (B), and selected borate factor (B*f*):

$$Alk_C = Alk_{TA} - (B \times Bf)$$

For example:
pH = 7.6; Alk_{TA} = 100 ppm; B = 50 ppm

$$Alk_C = Alk_{TA} - (B \times Bf)$$
$$Alk_C = 100 - (50 \times 0.17)$$
$$Alk_C = 92 \text{ ppm}$$

pH	B*f*
6.5	0.05
7.0	0.08
7.2	0.10
7.4	0.13
7.6	0.17
7.8	0.24
8.0	0.34
8.5	0.83

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ISO 9001:2015 Certified

TEST STRIPS ARE ALSO AVAILABLE IN CASE PACKS:

Pool (S-1331-12)
Tests for: free chlorine, pH, total alkalinity, and cyanuric acid

Spa (S-1332-12)
Tests for: total chlorine/bromine, pH, total alkalinity, and total hardness

7-Way (S-1335-12)
Tests for: free chlorine, total chlorine/bromine, pH, total alkalinity, total hardness, and cyanuric acid

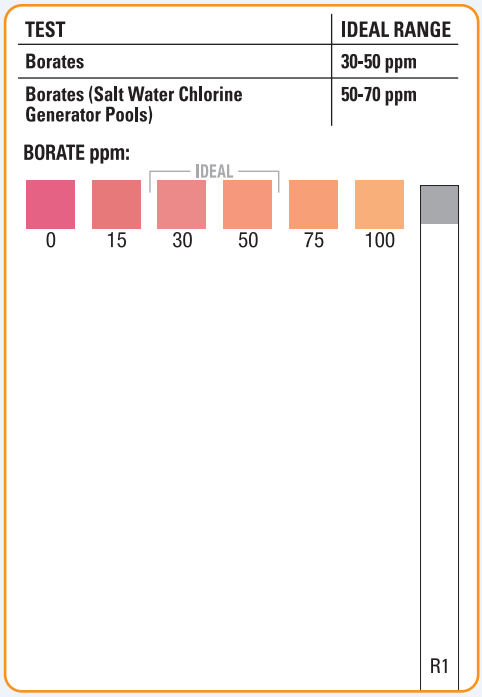
Service Pro (S-1351-6)
Tests for: free chlorine, total chlorine/bromine, pH, and total alkalinity

Salt (S-1341-12)
Tests for: sodium chloride

Borate (S-1342-9)
Tests for: borate

REPRESENTATIVE TEST PROCEDURE

Reproduced from S-1342 label:



USER BENEFITS

- Consistent chemistry from strip to strip and batch to batch.
- Shaker bottle prevents spoilage from moisture and air.
- Superior color standards for accurate color matching.
- Obtain results in seconds.
- Label includes target ranges generally accepted in the pool/spa industry.
- Borate Strips: 24-month shelf life
- Retail packaging display cartons available.