AquaChek®
POOL AND SPA TEST STRIPS

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Water Chemistry Guide
•
Water Treatment Tables

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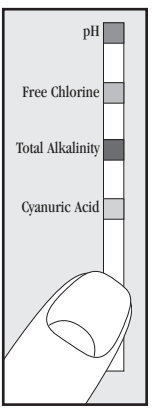
Basic Pool/Spa Water Chemistry



AquaChek® Yellow is a test for Free Chlorine, pH, Total Alkalinity and Cyanuric Acid. The test pads on the strip change color to indicate the levels in your pool or spa water. Be sure to snap the lid securely closed on the AquaChek bottle immediately after dispensing a strip. This will prevent strips from spilling and keep them fresh. **Store the strips in a cool, dry place, and leave the packet of drying agent in the bottle–it will keep the test strips at their best.**

This insert provides some basic information about water chemistry. The water treatment tables will help you use your test results to adjust your water properly.

WARNING: Exercise extreme caution when handling chemicals. Do not add chemicals when swimmers are in the water. Never store acids and chlorine compounds next to each other. Never mix chemicals together; add chemicals to the water one at a time. Handle acid very carefully. Wear protective eyewear and keep material away from children. **Always follow the chemical manufacturer's directions.**

To keep your pool at its best, test at each end a minimum of twice a week, and test your spa before each use. It's also a good idea to write down your results each time you test.

pH

pH refers to the intensity of acid or alkaline materials in your water. If pH is too high, scale can form on surfaces in contact with the water. If pH is too low, metal parts will corrode. Adjust Total Alkalinity before adjusting the pH; this will help prevent sudden fluctuations in pH.* When the pH is too low, add soda ash. When it is too high, add an acid. (See tables below.) For more detailed advice on the specific chemical treatment for your pool or spa, contact your dealer.

Raising pH with Soda Ash (Sodium Carbonate)
(When pH is under 7.2, add the amount of soda ash indicated below, then retest)

pH Level	Pool Volume				
	1,000 gal. / 3.8 kL	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
7.0 – 7.2	3/4 oz. / 21.3 g	4 oz. / 113 g	8 oz. / 227 g	12 oz. / 340 g	1 1/4 lbs. / 568 g
6.7 – 7.0	1 1/4 oz. / 35.4 g	6 oz. / 170 g	12 oz. / 340 g	1 lb. / 454 g	2 lbs. / 908 g
Under 6.7	1 1/2 oz. / 42.5 g	8 oz. / 227 g	1 lb. / 454 g	1 1/2 lbs. / 681 g	2 1/2 lbs. / 1.1 kg

Lowering pH using Dry Acid (Sodium Bisulfate)
(When pH is over 7.8, add the amount of acid indicated below, then retest)

pH Level	Pool Volume				
	1,000 gal. / 3.8 kL	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
7.8 – 8.0	0.1 lbs. / 45 g	0.3 lbs. / 136 g	0.6 lbs. / 272 g	0.9 lbs. / 408 g	1.5 lbs. / 681 g
8.0 – 8.4	0.2 lbs. / 91 g	0.5 lbs. / 227 g	1.0 lbs. / 454 g	1.5 lbs. / 681 g	2.5 lbs. / 1.1 kg
Over 8.4	0.3 lbs. / 136 g	0.8 lbs. / 363 g	1.5 lbs. / 681 g	2.3 lbs. / 1.0 kg	3.8 lbs. / 1.7 kg

Free Chlorine

Unlike most liquid test kits that measure only Total Chlorine (Total Chlorine includes both Free Chlorine and Combined Chlorine) in pool water, AquaChek Yellow tests for Free Chlorine. Free Chlorine is "good" chlorine that is still able to keep your pool fresh and clean. Combined Chlorine is chlorine that has used up its ability to sanitize. Too much Combined Chlorine causes eye irritation and strong pool odors. To maintain a clean and clear pool, keep the Free Chlorine level in the right range. But before making any adjustments, be sure that pH and Total Alkalinity are in the ideal ranges. If the Free Chlorine is too low, add Chlorine. (See tables below.) For more detailed advice on the specific chemical treatment for your pool or spa, contact your dealer.

See warnings for handling chemicals

ppm=mg/L

Chlorination Chart - Pools
(Amount Needed to Introduce 1 ppm)

Type of Chlorine	Pool Volume			
	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
Sodium Hypochlorite	5 1/2 oz. / 163 mL	10 1/2 oz. / 310 mL	1/2 qt. / 473 mL	3/4 qt. / 710 mL
Dichlor	1 oz. / 28.3 g	2 1/4 oz. / 63.8 g	3 1/4 oz. / 92.1 g	5 1/2 oz. / 149 g
Calcium Hypochlorite	1 oz. / 28.3 g	2 oz. / 56.7 g	3 oz. / 85 g	5 oz. / 142 g
Trichlor	3/4 oz. / 21.2 g	1 1/2 oz. / 42.5 g	2 1/4 oz. / 63.8 g	3 3/4 oz. / 106 g

Chlorine Treatment - Spas
(Amount Needed to Introduce 4 ppm)

Type of Chlorine	Spa Volume	
	250 gal. / 948 L	500 gal. / 1.9 kL
Dichlor	1/4 oz. / 7.0 g	1/2 oz. / 14.2 g
Sodium Hypochlorite	1 oz. / 29.6 mL	2 oz. / 59.1 mL
Lithium Hypochlorite	1/2 oz. / 14.2 g	1 oz. / 28.3 g

Superchlorination Chart - Pools*
(Amount Needed to Introduce 10 ppm)

Type of Chlorine	Pool Volume			
	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
Sodium Hypochlorite	1 3/4 qts. / 1.7 L	3 1/4 qts. / 3.0 L	1 1/4 gal. / 4.7 L	2 gal. / 7.6 L
Dichlor	11 oz. / 311 g	1 1/3 lbs. / 605 g	2 lbs. / 908 g	3 1/3 lbs. / 1.5 kg
Calcium Hypochlorite	10 oz. / 284 g	1 1/4 lbs. / 568 g	2 lbs. / 908 g	3 1/4 lbs. / 1.5 kg

Superchlorination Chart - Spas*
(Amount Needed to Introduce 10 ppm)

Type of Chlorine	Spa Volume	
	250 gal. / 948 L	500 gal. / 1.9 kL
Dichlor	2/3 oz. / 18.9 g	1 1/4 oz. / 35.1 g
Sodium Hypochlorite	2 1/2 oz. / 74 mL	5 oz. / 148 mL
Lithium Hypochlorite	1 oz. / 28.3 g	2 oz. / 56.7 g

*To superchlorinate ("shock") water that has no measurable Free Chlorine in it, bring the Free Chlorine level up to 10 ppm and hold that level for 4 hours.

Total Alkalinity

Total Alkalinity measures the amount of alkaline substances (carbonates and bicarbonates) in your water. Alkaline substances buffer your water against sudden changes in the pH of the water. It is important to prevent pH changes that can cause corrosion or scaling of metal fixtures. Total Alkalinity should be adjusted before adding chemicals to balance pH or Free Chlorine.* If Total Alkalinity is too low, add sodium bicarbonate. If Total Alkalinity is too high, add an acid. (See tables below.) For more detailed advice on the specific chemical treatment for your pool or spa, contact your dealer.

**Note:* Low pH readings may result when Total Alkalinity is less than 80 ppm (parts per million). If the Total Alkalinity pad turns blue (very high) or yellow (very low), adjust the Total Alkalinity. Re-test until the test shows the alkalinity to be within the ideal range of 80-120 ppm.

Raising Alkalinity With Sodium Bicarbonate

Increase in Total Alkalinity in ppm	Pool Volume				
	1,000 gal. / 3.8 kL	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
10	2 1/2 oz. / 62 g	12 oz. / 340 g	1 1/2 lbs. / 681 g	2 1/4 lbs. / 1 kg	3 3/4 lbs. / 1.7 kg
20	4 3/4 oz. / 135 g	1 1/2 lbs. / 681 g	3 lbs. / 1.4 kg	4 1/2 lbs. / 2 kg	7 1/2 lbs. / 3.4 kg
50	12 oz. / 340 g	3 3/4 lbs. / 1.7 kg	7 1/2 lbs. / 3.4 kg	11 1/4 lbs. / 5 kg	18 3/4 lbs. / 8.5 kg

Lowering Alkalinity With Dry Acid (Sodium Bisulfate)

Decrease in Total Alkalinity in ppm	Pool Volume				
	1,000 gal. / 3.8 kL	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
10	2 1/2 oz. / 70.8 g	12 3/4 oz. / 361 g	1 1/2 lbs. / 681 g	2 1/2 lbs. / 1.1 kg	4 lbs. / 1.8 kg
20	5 oz. / 142 g	1 1/2 lbs. / 681 g	3 1/4 lbs. / 1.5 kg	4 3/4 lbs. / 2.2 kg	8 lbs. / 3.6 kg
50	12 3/4 oz. / 361 g	4 lbs. / 1.8 kg	8 lbs. / 3.6 kg	12 lbs. / 5.4 kg	20 3/4 lbs. / 9.4 kg

Cyanuric Acid

"Stabilizer" or "Conditioner"

Cyanuric acid, also called "stabilizer" or "conditioner," makes chlorine more stable when exposed to the sun's ultraviolet rays. A low cyanuric acid reading indicates that chlorine will dissipate very quickly when exposed to sunlight. Two types of chlorine compounds, dichlor and trichlor, already contain some cyanuric acid. Cyanuric acid may build up with the continued use of one of these sanitizers. If you are using a liquid sanitizer, you will want to add cyanuric acid to the water. (See table below.) Too much cyanuric acid in the pool can reduce chlorine efficiency and contribute to scale, stains or cloudy water. For more detailed advice on the specific chemical treatment for your pool or spa, contact your dealer.

The most common way to decrease the amount of cyanuric acid is to drain and refill the pool. For example, if you drain and refill half of the pool water, you will decrease the cyanuric acid level by 50%.

Establishing or Increasing Cyanuric Acid Level

Increase in Cyanuric Acid in ppm	Pool Volume				
	1,000 gal. / 3.8 kL	5,000 gal. / 19 kL	10,000 gal. / 38 kL	15,000 gal. / 57 kL	25,000 gal. / 95 kL
10	1 1/4 oz. / 35 g	6 1/2 oz. / 184 g	12 3/4 oz. / 361 g	1 1/4 lbs. / 567 g	2 lbs. / 0.9 kg
20	2 1/2 oz. / 70.9 g	12 3/4 oz. / 361.5 g	1 3/4 lbs. / 0.8 kg	2 1/2 lbs. / 1.1 kg	4 lbs. / 1.8 kg
30	4 oz. / 113 g	1 1/4 lbs. / 567 g	2 1/2 lbs. / 1.1 kg	3 3/4 lbs. / 1.7 kg	6 1/4 lbs. / 2.8 kg

To learn more about pool and spa water testing,
visit our web site, **www.AquaChek.com**

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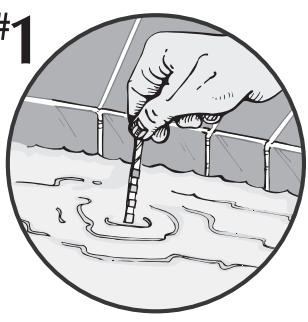
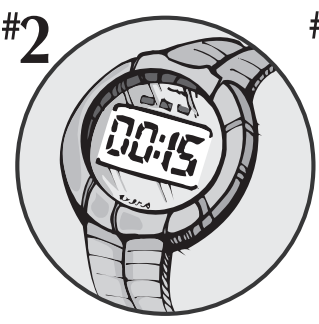


DIP & REMOVE



WAIT 15 SECONDS

COMPARE

ENGLISH

Directions: **1.** Dip a strip into water and remove immediately. **2.** Hold strip level for 15 seconds (do not shake excess water from strip.) **3.** Compare pH, Free Chlorine, Total Alkalinity and Stabilizer pads (in that order) to color chart on label.

For best results on Stabilizer (Cyanuric Acid) test, pH should be between 7.0-8.4 and Total Alkalinity should be at or below 240 ppm.

Important: Keep cap closed tight between uses. Store at room temperature. Use by expiration date on cap.

FR

Directions : **1.** Trempez la bandelette dans l'eau et retirez-la immédiatement. **2.** Tenez la bandelette à l'horizontale pendant 15 secondes (n'essorez pas l'eau accumulée sur la bandelette). **3.** Comparez les carrés de pH, chlore libre, alcalinité totale et stabilisant (dans cet ordre) au tableau des couleurs situé sur l'étiquette.

Pour avoir les meilleurs resultants sur le test de stabilisant (acide cyanurique), le pH devrait se trouver entre 7,0 et 8,4 et l'alcalinité totale devrait se situer à 240 ppm ou moins.

Important : Gardez toujours le bouchon correctement vissé entre les utilizations. Ragez à Temperature ambiante. Utiliser avant la date de preemption indiquée sur le bouchon.
Pour interpréter le tableau sur la bouteille : LOW = BAS, OK = OK, HIGH = HAUT

ES

Instrucciones: **1.** Sumerja una cinta en el agua y retírela inmediatamente. **2.** Sostenga la cinta a nivel durante 15 segundos (no sacuda el exceso de agua de la cinta) **3.** Compare los indicadores de pH, cloro libre, alcalinidad total y estabilizador (en ese orden) con la carta de colores en la etiqueta.

Para obtener mejores resultados en la prueba del estabilizador (ácido cianúrico), el pH debe estar entre 7.0 y 8.4 y la alcalinidad total debe estar en o por debajo de 240 ppm

Importante: Mantenga la tapa muy bien cerrada entre usos. Conserve a temperatura ambiente. Use antes de la fecha de vencimiento que figura en la tapa.
Interpretar la tabla en el frasco: LOW = BAJO, OK = OK, HIGH = ALTO

IT

Indicazioni: **1.** Immergere una striscia nell'acqua e rimuovere immediatamente. **2.** Tenere la striscia orizzontale per 15 secondi (senza scuotere via l'acqua in eccesso). **3.** Confrontare sulla tabella a colori dell'etichetta i settori relativi a pH, cloro libero, alcalinità totale e stabilizzante (in questo ordine).

Per ottenere risultati ottimali al test dello stabilizzante (acido cianurico), il pH deve essere tra 7,0-8,4 e l'alcalinità totale ad un massimo di 240 ppm.

Importante: tra un utilizzo e l'altro, tenere chiuso il tappo. Conservare a temperatura ambiente. Utilizzare prima della data di scadenza.
Per interpretare la tabella sulla bottiglia: LOW=BASSO, OK=OK, HIGH=ALTO

PT

Instruções: **1.** Mergulhar uma fita na água e retirar imediatamente. **2.** Manter a fita nivelada durante 15 segundos (não sacudir o excesso de água da fita) **3.** Comparar os indicadores de pH, cloro livre, alcalinidade total e estabilizador (por esta ordem) com o quadro de cores na etiqueta.

Para melhores resultados no teste do Estabilizador (ácido cianúrico), o pH deve situar-se entre 7,0 e 8,4 e a alcalinidade total deve ser igual ou inferior a 240 ppm.

Importante: Manter a tampa bem fechada entre utilizações. Conservar à temperatura ambiente. Utilizar até à data de validade indicada na tampa.
Para interpretar o quadro no frasco: LOW=BAIXO, OK=OK, HIGH=ALTO

DE

Anweisungen: **1.** Einen Streifen ins Wasser tauchen und sofort herausnehmen. **2.** Streifen 15 Sekunden lang waagerecht halten. (Überschüssiges Wasser nicht abschütteln.) **3.** Die Felder für pH-Wert, freies Chlor, Gesamtalkalität und Stabilisator (in dieser Reihenfolge) mit der Farbskala auf dem Etikett vergleichen.

Die besten Ergebnisse für den Stabilisatortest (Cyanursäure) ergeben sich bei einem pH-Wert zwischen 7,0 und 8,4 und einer Gesamtalkalität von 240 ppm oder darunter.

Wichtig: Verschlusskappe nach Gebrauch gut schließen. Bei Raumtemperatur lagern. Vor Ablauf des Verfallsdatums verwenden (siehe Verschlusskappe).
Erklärung der Farbskala auf der Flasche: LOW = TIEF, OK = OK, HIGH = HOCH

NL

Aanwijzingen: **1.** Dompel een strip onder in het water en haal er direct weer uit. **2.** Houd de strip 15 seconden horizontaal (het overtollige water niet van de strip schudden) **3.** Vergelijk de pH, het vrije chloorgehalte, de totale alkaliteit en de stabilisator van de pads (in die volgorde) met de kleurenkaart op het etiket.

Voor het beste resultaat met de stabilisator (cyanuurzuur) –test moet de pH tussen 7,0 en 8,4 zijn en de totale alkaliteit 240 ppm of minder bedragen.

Belangrijk: Na elk gebruik moet de dop stevig gesloten worden. Bij kamertemperatuur bewaren. Niet gebruiken na de op de dop vermelde uiterste gebruiksdatum.
Voor de beoordeling van de kaart op de fles: LOW=LAAG, OK=OK, HIGH=HOOG

DK

Vejledning: **1.** Dyp en strimmel i vand og fjern den øjeblikkelig. **2.** Hold strimmelen vandret i 15 sekunder (ryst ikke overskydende vand af strimmelen). **3.** Sammenlign pH, Fri klorin, Samlede mængde alkalitet og stabilisatorbelægninger (i samme rækkefølge) med farvekortet på etiketten.

For at opnå det bedste resultat på stabilisator- (Cyanurisk syre) testen, bør pH være mellem 7.0-8.4 og samlede alkalitet bør være på eller under 240 ppm.

Vigtigt: Hold låget stramt lukket, når produktet ikke er i brug. Opbevar ved stuetemperatur. Anvendes inden udløbsdatoen øverst på låget.
For at tolke diagram på flaske: LOW=LAV, OK=OK, HIGH=HØJ

SE

Instruktioner: **1.** Doppa ner teststickan i vattnet och ta upp den omedelbart. **2.** Håll upp stickan i 15 sekunder (skaka inte av överflödigt vatten från stickan). **3.** Jämför pH, fritt klor, total alkalinitet och stabilisator (i den ordningen) med färgskalan.

För bästa resultat på stabiliseringstest (cyanursyra), ska pH ligga mellan 7,0-8,4 och total alkalinitet ska ligga under 240 ppm.

Viktigt: Tillslut förpackningen noga mellan användningarna. Förvara i rumstemperatur. Använd före bäst-före-datum på locket.
Utläs markeringarna på flaskan enligt följande: LOW=LÅG, OK=OK, HIGH=HÖG

RU

Применение: **1.** Опустите полоску в воду и немедленно извлеките. **2.** Подержите полоску горизонтально 15 секунд (не стряхивайте излишки воды с полосы). **3.** Сравните индикаторы водородного показателя (pH), свободного хлора, общей щелочности и стабилизатора (в таком же порядке) с цветной таблицей на этикетке.

Результат теста на стабилизатор (циануриновая кислота) считается оптимальным, если водородный показатель составляет от 7,0 до 8,4, а общая щелочность – не более 240 промилле.

Внимание! Держите крышку плотно закрытой между проверками. Хранить при комнатной температуре. Использовать до срока годности, указанного на крышке.
Интерпретация таблицы на флаконе: LOW=НИЗКИЙ, OK=НОРМА, HIGH=ВЫСОКИЙ

PL

Wskazówki: **1.** Włożyć pasek do wody i natychmiast wyjąć. **2.** Przez 15 sekund trzymać pasek poziomo (nie strząsać z paska nadmiaru wody) **3.** Porównać pola testowe dla chloru wolnego, zasadowości całkowitej i stabilzatora (w tej kolejności) ze skalą kolorów na etykiecie.

Najlepsze wyniki testów stabilizatora (kwas cyjanurowy) uzyskuje się przy pH 7,0-8,4 i całkowitej zasadowości 240 ppm lub niższej.

Ważne: Po użyciu produktu szczelnie zamknąć pojemnik. Przechowywać w temperaturze pokojowej. Nie używać po upływie daty ważności podanej na pokrywce.
Interpretacja skali na butelce: LOW =NISKA OK=OK HIGH=WYSOKA

CZ

Pokyny: **1.** Ponořte proužek do vody a okamžitě jej vytáhněte. **2.** Držte proužek ve vodorovné poloze 15 sekund (nesetřepávejte přebytečnou vodu z proužku). **3.** Porovnejte barvu polštářku pro měření pH, volného chlóru, celkové alkality a stabilizátoru (v tomto pořadí) s barevnou tabulkou na štítku.

Nejlepších výsledků při zkoušce stabilizátoru (kyselina kyanurová) se dosahuje při pH v rozmezí 7,0 až 8,4 a celková alkalita by měla být nejvýše 240 ppm.

Důležité upozornění: Pokud přípravek nepoužíváte, víčko pevně dotáhněte. Používejte do data uvedeného na víčku.
Pro výklad diagramu na láhvi: LOW = NÍZKÝ, OK = OK, HIGH = VYSOKÝ

EL

Οδηγίες: **1.** Εμβαπτίστε μια ταινία στο νερό και αφαιρέστε την αμέσως. **2.** Κρατήστε την ταινία οριζόντια για 15 δευτερόλεπτα (μην τινάξετε την περίσσεια νερού από την ταινία) **3.** Συγκρίνετε τις πλακέτες του pH, του ελεύθερου χλωρίου, της ολικής αλκαλικότητας και του σταθεροποιητή (με τη σειρά αυτή) με το χρωματικό διάγραμμα στην ετικέτα.

Για καλύτερα δυνατά αποτελέσματα στην εξέταση σταθεροποιητή (Κυανουρικό οξύ), το pH πρέπει να βρίσκεται μεταξύ 7,0-8,4 και η ολική αλκαλικότητα πρέπει να έχει τιμή ίση ή μικρότερη από 240 ppm.

Σημαντικό: Διατηρείτε το πώμα ερμητικά κλειστό μεταξύ των χρήσεων. Φυλάσσετε σε θερμοκρασία δωματίου. Χρησιμοποιείτε έως την ημερομηνία λήξης που αναγράφεται στο πώμα.
Για την ερμηνεία του διαγράμματος οτη Φιάλ: LOW=ΧΑΜΗΛΟ, OK=OK, HIGH=ΥΨΗΛΟ

HU

Útmutatás: **1.** Merítsen egy csíkot vízbe és azonnal vegye is ki. **2.** Tartsa kézben a csíkot 15 másodpercig (ne rázza le róla a vizet). **3.** Hasonlítsa össze a pH, szabad klórtartalom, teljes lúgtartalom, és stabilizátor lapokat (ebben a sorrendben) a címkén található színskálával.

A stabilizátor (cianhúgysav) teszt optimális működéséhez a pH értéknek 7,0-8,4 között, az összlúg értéknek pedig 240 ppm alatt kell lennie.

Fontos: Használat után szorosan zárja vissza a kupakot. Szobahőmérsékleten tárolja. A kupakon jelzett lejárati idő után ne haszálja.
Az üvegen található diagramm magyarázata: LOW=ALACSONY, OK=RENDBEN, HIGH=MAGAS

TR

Talimat: **1.** Bir stripi suya daldırın ve hemen çıkarın. **2.** Stripi 15 saniye yatay tutun (stripten fazla suyu sallayarak gidermeyin) **3.** pH, Serbest Klor, Toplam Alkalinite ve Stabilizatör kısımlarını (bu sırayla) etiketteki renk şemasıyla karşılaştırın.

Stabilizatör (Siyanürik Asit) testinden en iyi sonuçları almak için pH 7,0 ile 8,4 arasında ve Toplam Alkalinite 240 ppm veya daha düşük olmalıdır.

Önemli: Kullanılmadığında kapağı sıkıca kapalı tutun. Oda sıcaklığında saklayın. Kapaktaki son kullanma tarihinden önce kullanın.
Şişedeki tabloyu yorumlamak için: LOW=DÜŞÜK, OK=İYİ, HIGH=YÜKSE

ppm = mg/L ppm (частей на миллион) = мг / л