Pool LAB 1.0

User Manual
Manuel d'utilisation
Manual de usuario
Gebrauchsanleitung
Manuale dell'utente

CONTENT • CONTENU • CONTENIDO INHALT • CONTENUTO

DELIVERY CONTENT

1 x	PoolLab 1.0
1 x	Light shield
3 x	AAA Batteries
1 x	Crushing / Stirring Rods
1 x	10ml syringe
1 x	User guide
20 x	Phenol Red Photometer tablets
20 x	DPD N° 1 Photometer tablets
10 x	DPD N° 3 Photometer tablets
10 x	-Test Photometer tablets
10 x	Alkalinity-M Photometer tablets

Poison center Munich (24/7):
+49 (0) 89-19240 (German and English)

Reagents for water-analysis only!
Do not eat! Keep out of reach of children!
Store cool and dry!

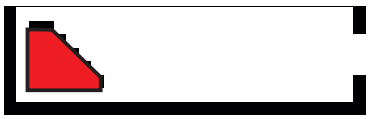
Utiliser uniquement des réactifs
pour l'analyse de l'eau!
Ne pas avaler!
Garder hors de portée des enfants!
Stocker au frais et au sec!

Pastillas para el análisis del agua,
solamente para análisis químicos!
No para tomar!
No debe llegar a las manos de niños!
Consérvese en lugar fresco y seco!

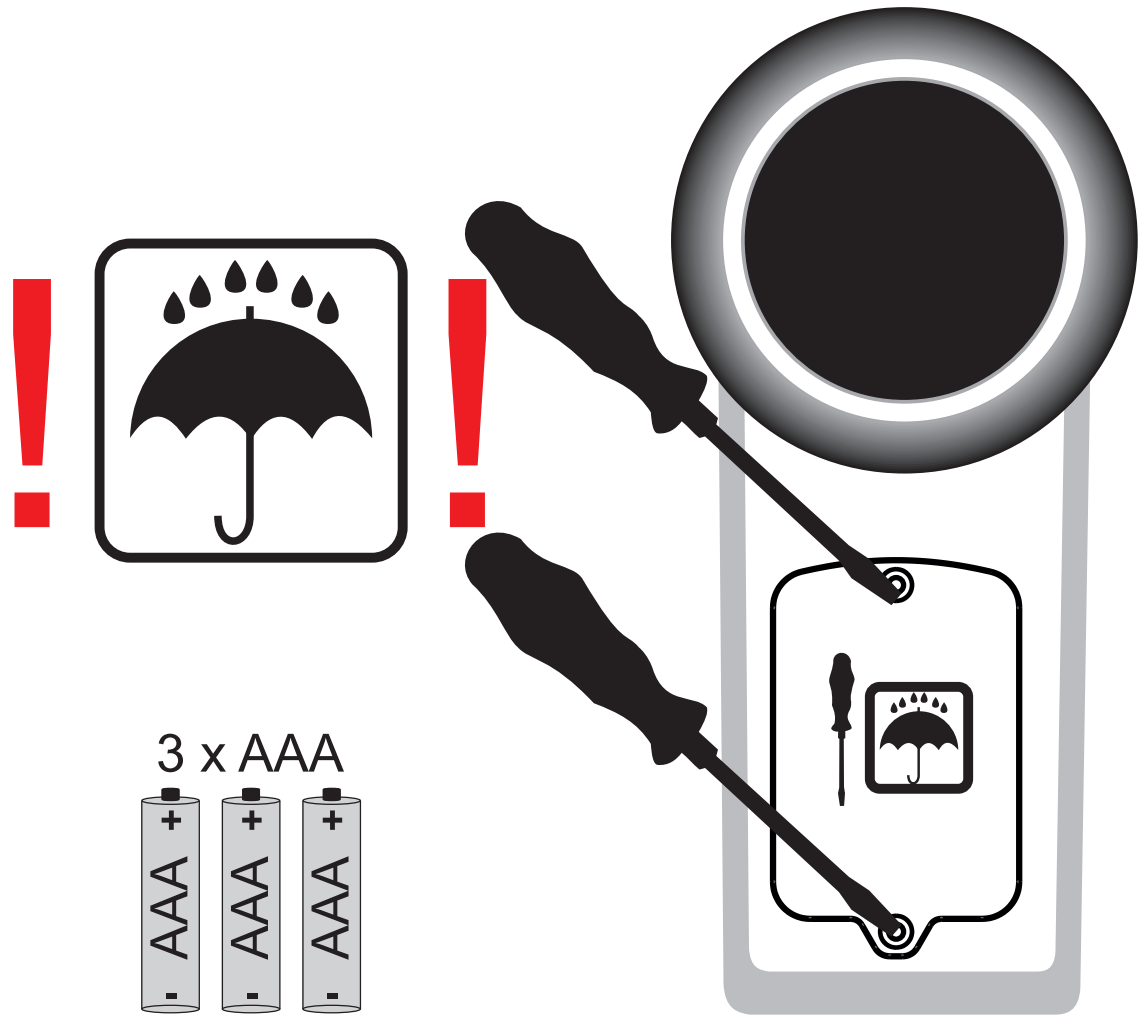
Wasseranalysetabletten nur für chemische
Analysen! Nicht einnehmen! Darf nicht in die
Hände von Kindern gelangen!
Kühl und trocken lagern!

Pastiglie per analisi dell'acqua per l'industria chimica!
Non ingerire! Tenere fuori dalla portata dei bambini!
Conservare in luogo fresco ed asciutto!

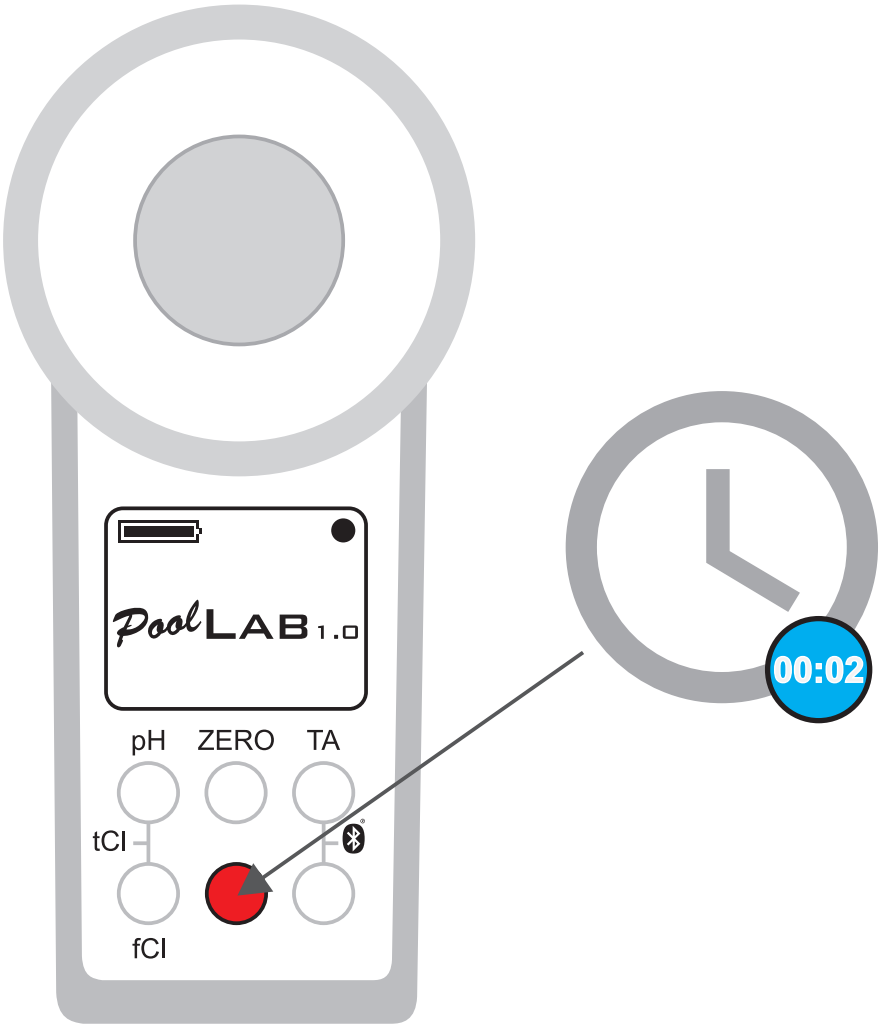
BATTERIES • PILES • PILAS
BATTERIEN • BATTERIE



change
chargement
cambio
wechseln
cambiamento



SWITCH ON • ALLUMER • ENCENDER
EINSCHALTEN • ACCENDERE



On/Off button can also be used to skip countdown during measurement (not recommended)

Le bouton Marche / Arrêt peut être également utilisé pour ignorer le compte à rebours lors de la mesure (non recommandé)

El botón de On/Off también se puede utilizar para cancelar la cuenta atrás durante la medición (no se recomienda)

Der On/Off Knopf kann auch zum Abbrechen des Countdowns während der Messung verwendet werden (nicht empfohlen)

Il pulsante On/Off può anche essere utilizzato per annullare il conto alla rovescia durante la misurazione (non raccomandato)

! ADVICES • CONSEILS • CONSEJOS HINWEISE • CONSIGLI !

PHOTOMETER

Always use PHOTOMETER grade tablets!
Never use RAPID grade tablets!
Do not touch reagent tablets!

Toujours utiliser des pastilles de qualité PHOTOMETRE! Ne jamais utiliser des pastilles de qualité "RAPID" !
Ne touchez pas les pastilles avec les mains!

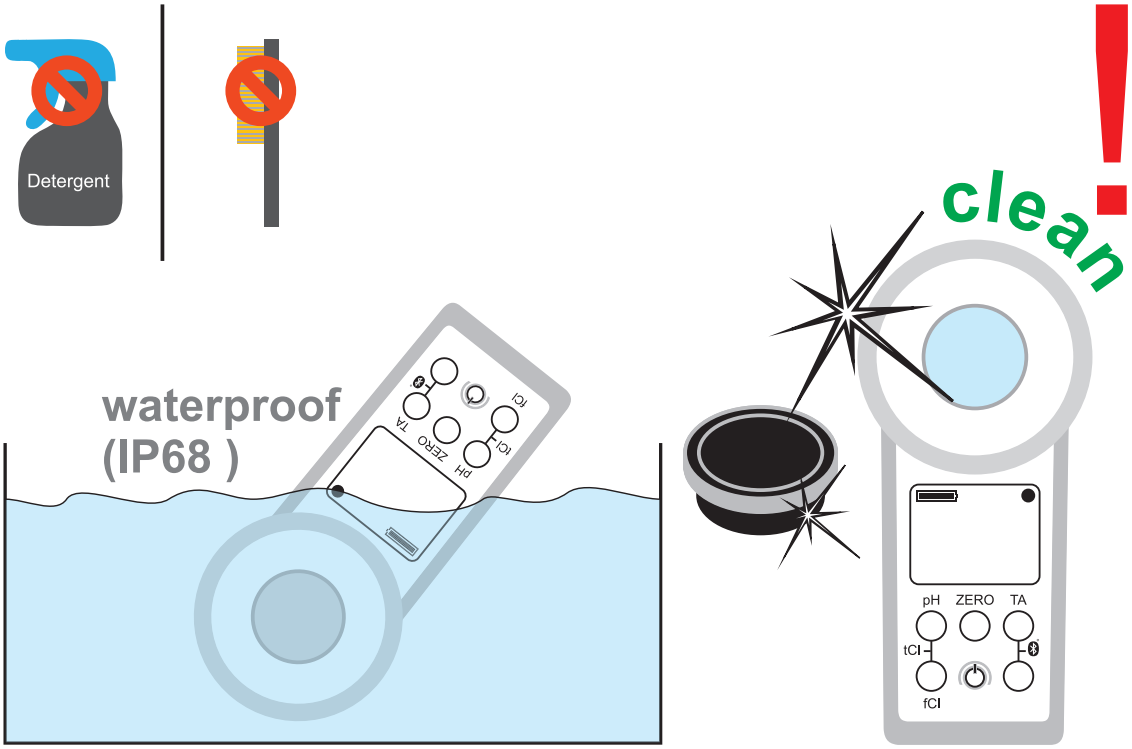
RAPID

¡Usar siempre tabletas FOTÓMETRO y nunca usar tabletas RAPID! Las tabletas no se deben tocar!

Immer PHOTOMETER-Tabletten und nie RAPID-Tabletten verwenden! Die Tabletten dürfen nicht berührt werden!

Sempre usare pasticche FOTOMETRO e non usare mai pasticche RAPID! Le pasticche non devono essere toccati!

IMPORTANT • IMPORTANTE • WICHTIG



It is important to clean the device after each measurement to get rid of any reagent residues!

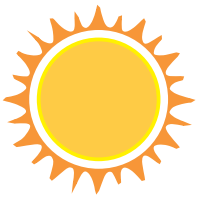
Il est important de nettoyer le dispositif après chaque mesure pour éliminer les résidus de réactifs!

Es importante limpiar el dispositivo después de cada medición para deshacerse de cualquier residuo de reactivo!

Es ist wichtig, das Gerät nach jeder Messung zu reinigen, um sämtliche Reagenzienrückstände zu entfernen!

E 'importante pulire il dispositivo dopo ogni misura per eliminare eventuali residui di reagenti!

IMPORTANT • IMPORTANTE • WICHTIG



Do not leave the device in the sun!

Ne laissez pas l'appareil au soleil!

¡No deje el dispositivo al sol!

Lassen Sie das Gerät nicht in der Sonne liegen!

Non lasciare il dispositivo al sole!

The PoolLab is also suitable for saltwater pools / salt electrolysis pools!

Le PoolLab convient également aux piscines d'eau salée / piscines d'électrolyse au sel!

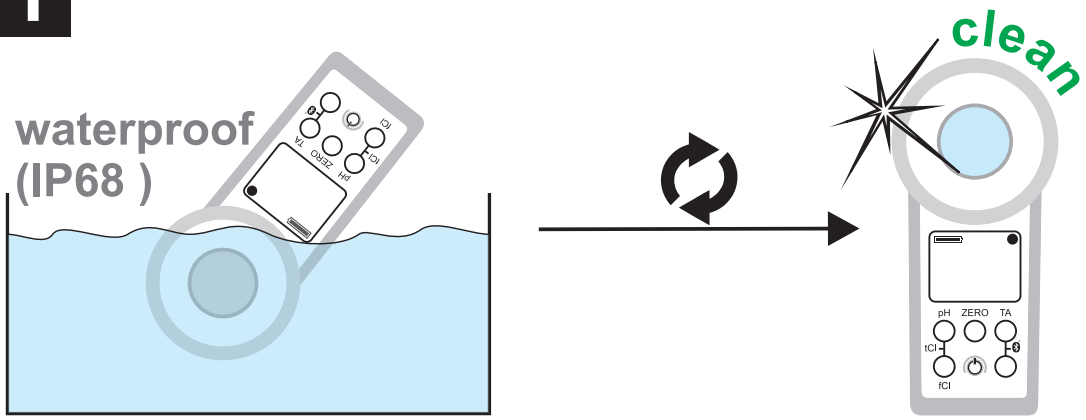
PoolLab también es adecuado para piscinas de agua salada / piscinas de electrólisis salina!

Der PoolLab ist auch für Salzwasserpools / Pools mit Salzelektrolyse geeignet!

PoolLab è adatto anche per piscine di acqua salata / piscine con elettrolisi del sale!

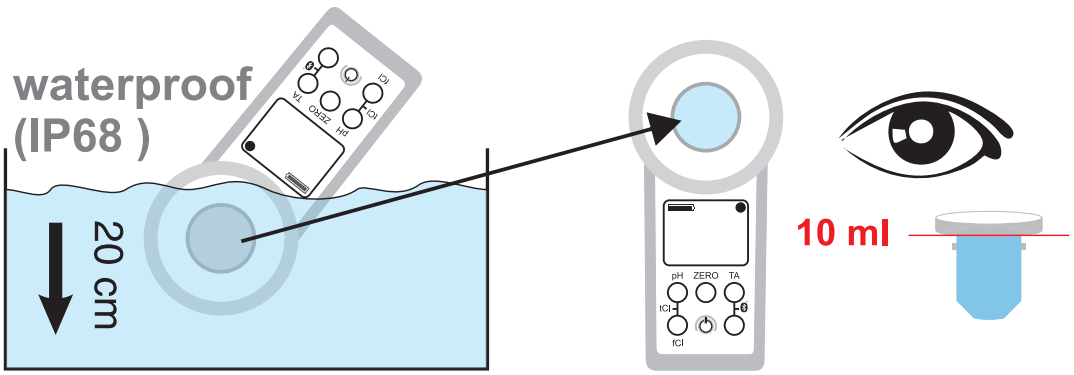
ZERO

1

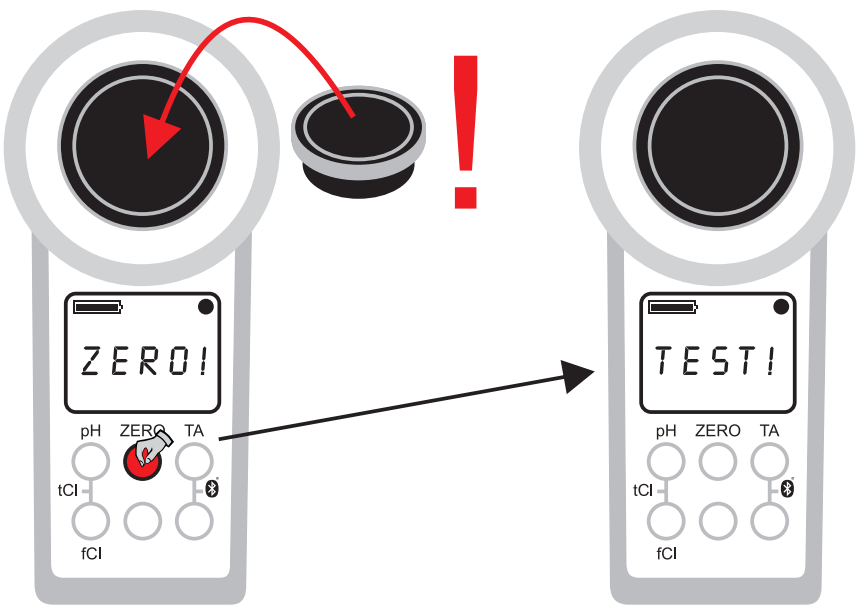


2

take 10 ml water sample



3



Only 1 time per test batch • Une seule fois par lot de test • Sólo una vez por lote de prueba • Nur 1 x pro Testreihe • solo una volta per test in batch

Once you performed ZERO, all measurements, like pH, chlorine... can be done one after each other without the need to do a ZERO again. The ZERO will be stored until the device will be switched off. Nevertheless, ZERO can be performed before each measurement, if wished.

Une fois que vous avez effectué ZERO, toutes les mesures, comme le pH, le chlore ... peuvent être effectuées l'une après l'autre sans avoir besoin de faire un ZERO à nouveau. Le ZERO sera stocké jusqu'à ce que l'appareil soit éteint. Néanmoins, un ZERO peut être effectué avant chaque mesure, si vous le désirez.

ZERO se tiene que hacer sólo una vez por cada serie de pruebas. Una vez que se hace, todas las mediciones posteriores (por ejemplo, pH, cloro ...) se pueden realizar en secuencia y sin volver a hacer ZERO. Si se desea, de todos modos se puede hacer ZERO antes de cada medición.

ZERO muss nur einmal pro Testreihe durchgeführt werden. Sobald erfolgt, können alle folgenden Messungen (z.B. pH, Chlor...) nacheinander und ohne erneutes ZERO vorgenommen werden. Falls gewünscht, kann trotzdem vor jeder Messung ZERO durchgeführt werden.

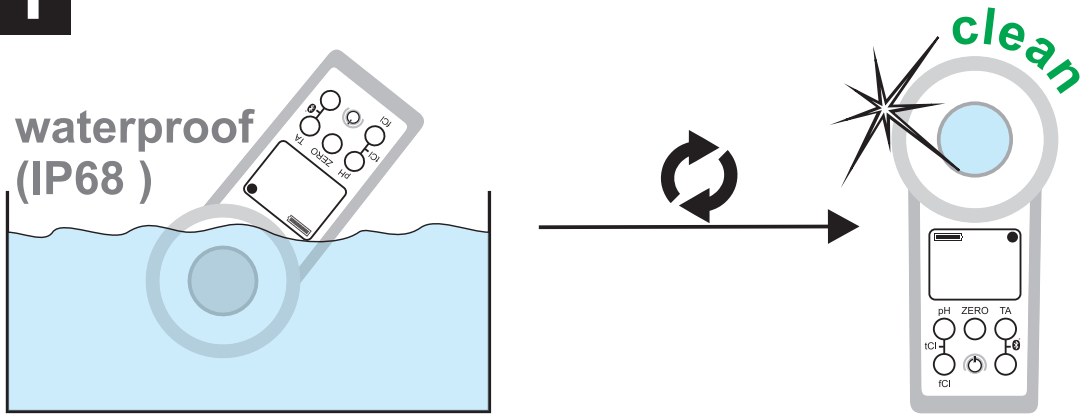
ZERO deve essere fatto solo una volta per serie di test. Una volta è fatto, tutte le misure successive (ad esempio, pH, cloro ...) possono essere eseguite in sequenza e senza ri-ZERO. Se desiderato, ancora può essere effettuata prima di ogni misurazione ZERO

pH

6.50 - 8.40 pH

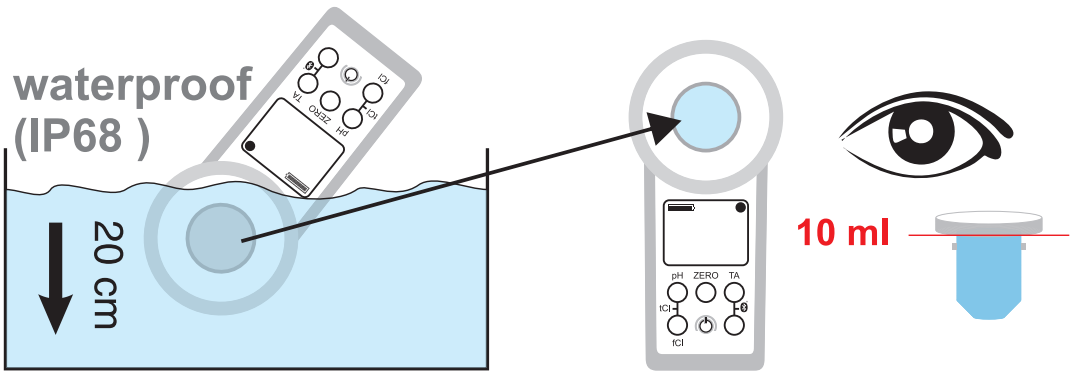
Phenol Red Photometer

1



2

take 10 ml water sample



The Total Alkalinity value has to be minimum 50 mg/l to obtain a correct pH value.

La valeur totale de l'alcalinité doit être au minimum de 50 mg / l pour obtenir une valeur de pH correcte.

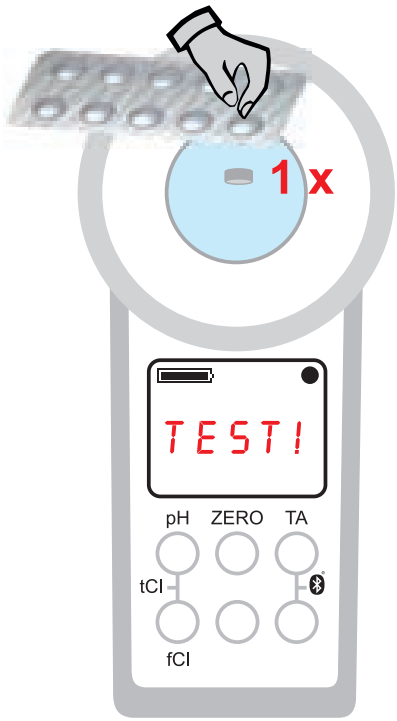
El valor de alcalinidad debe ser superior a 50 mg / L para obtener un pH correcto.

Der Alkalinitätwert muss mindestens 50 mg/l betragen, um eine korrekte pH Messung durchzuführen.

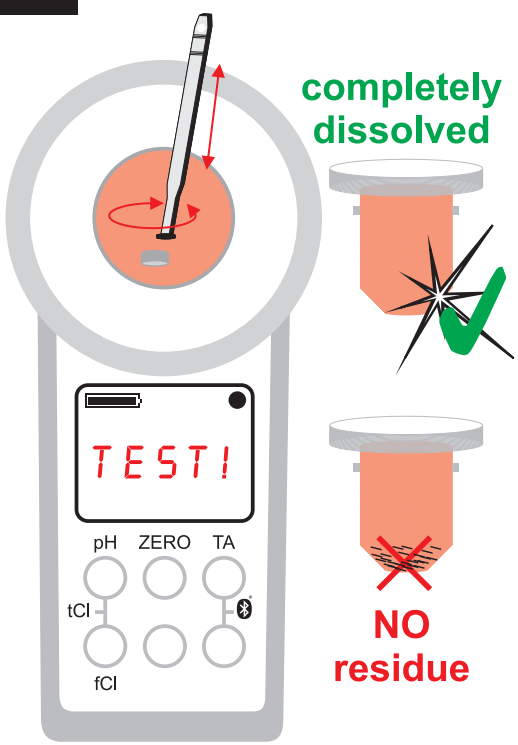
Il valore di alcalinità deve essere superiore a 50 mg / L per ottenere un pH corretto.

3

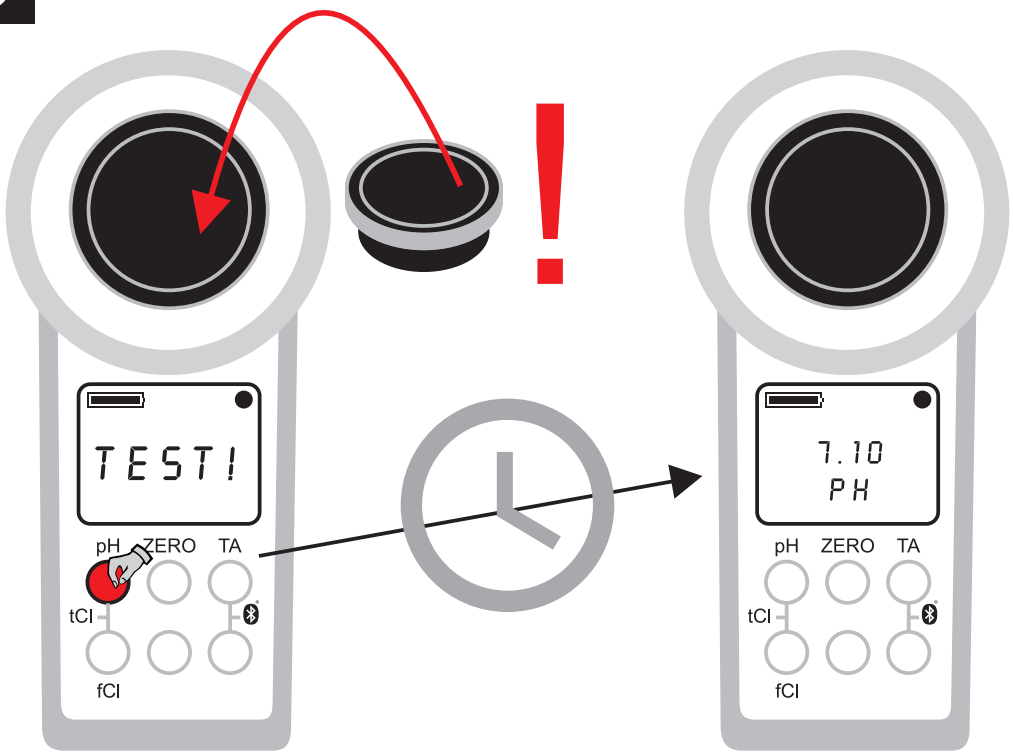
Phenol Red
Photometer



4



5

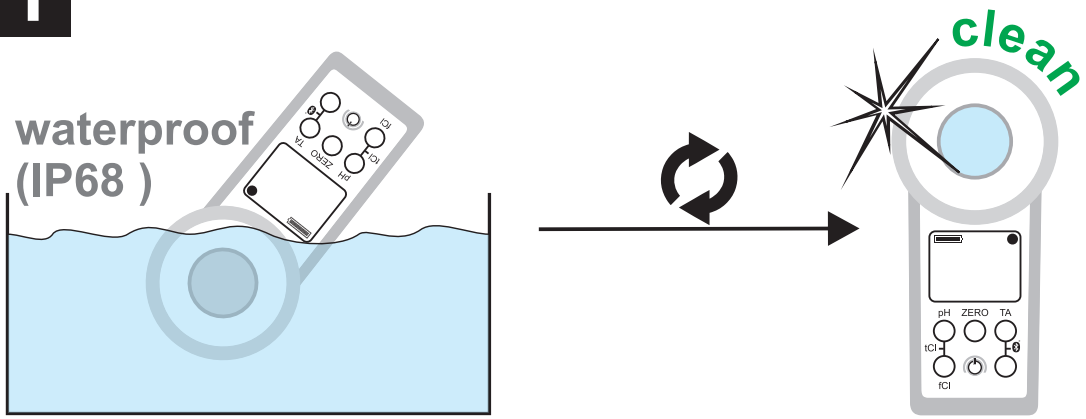


Chlorine
Chlore
Cloro
Chlor
Cloro

0.00 - 8.00 mg/l (ppm)

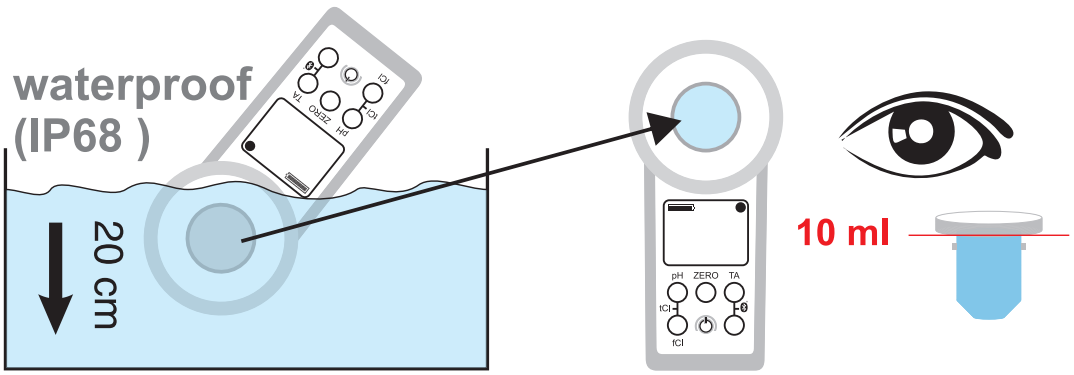
DPD N° 1 Photometer
DPD N° 3 Photometer

1



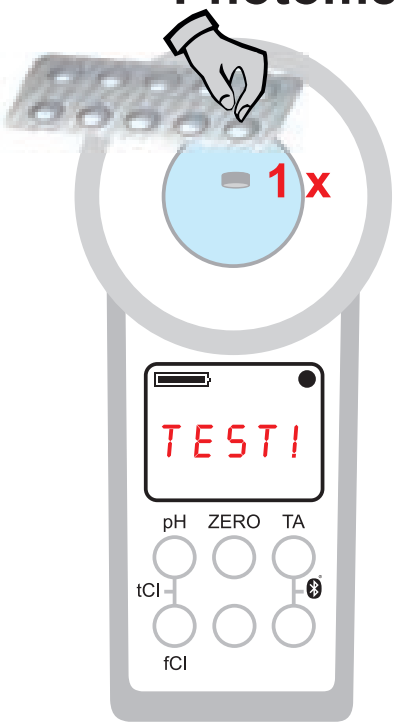
2

take 10 ml water sample

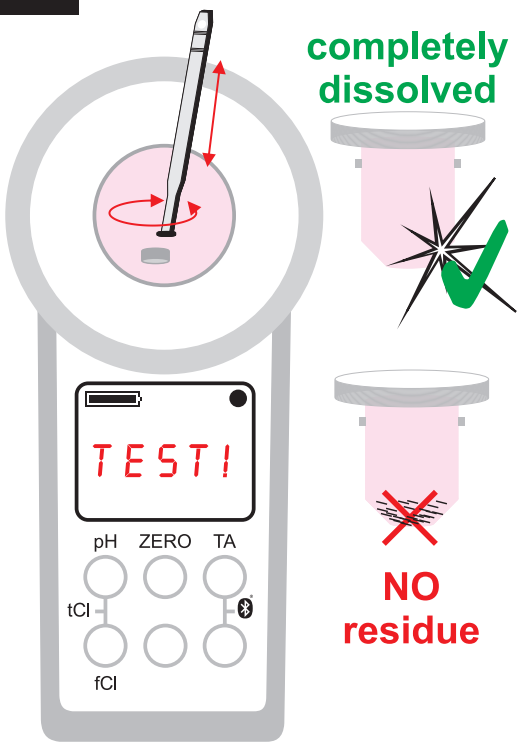


3

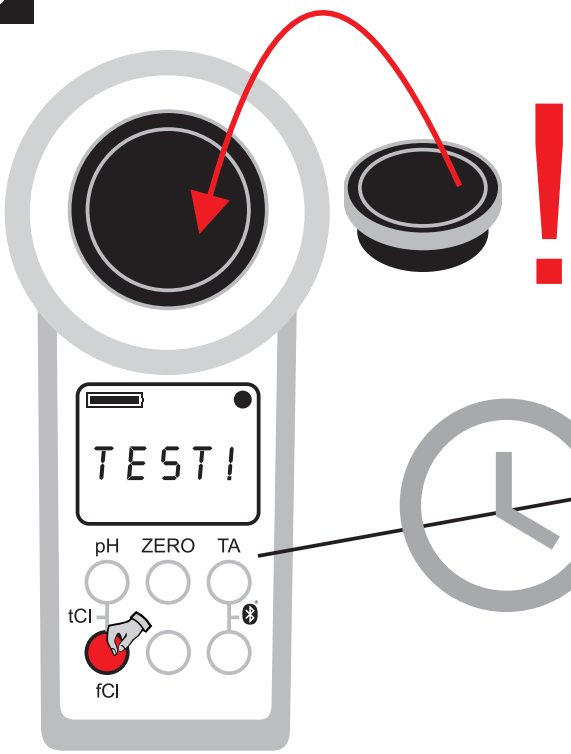
DPD N° 1
Photometer



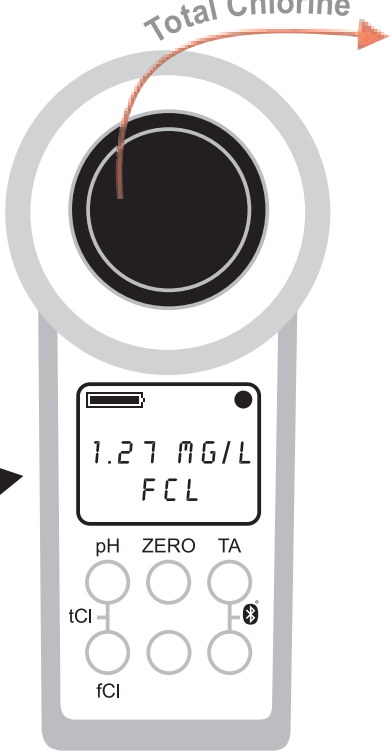
4



5



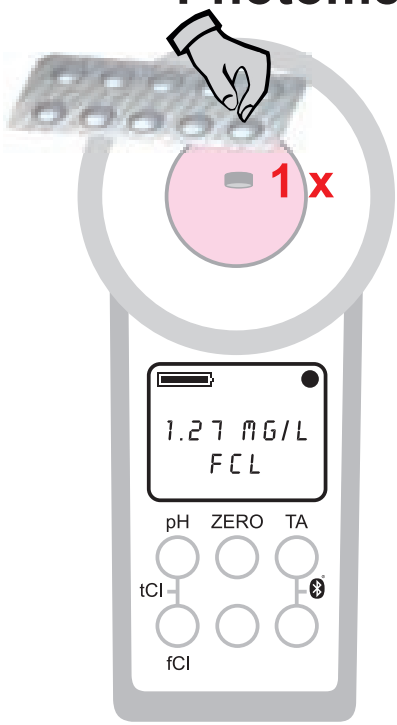
6



Total Chlorine • Chlore total • Cloro total Gesamt-Chlor • Cloro totale

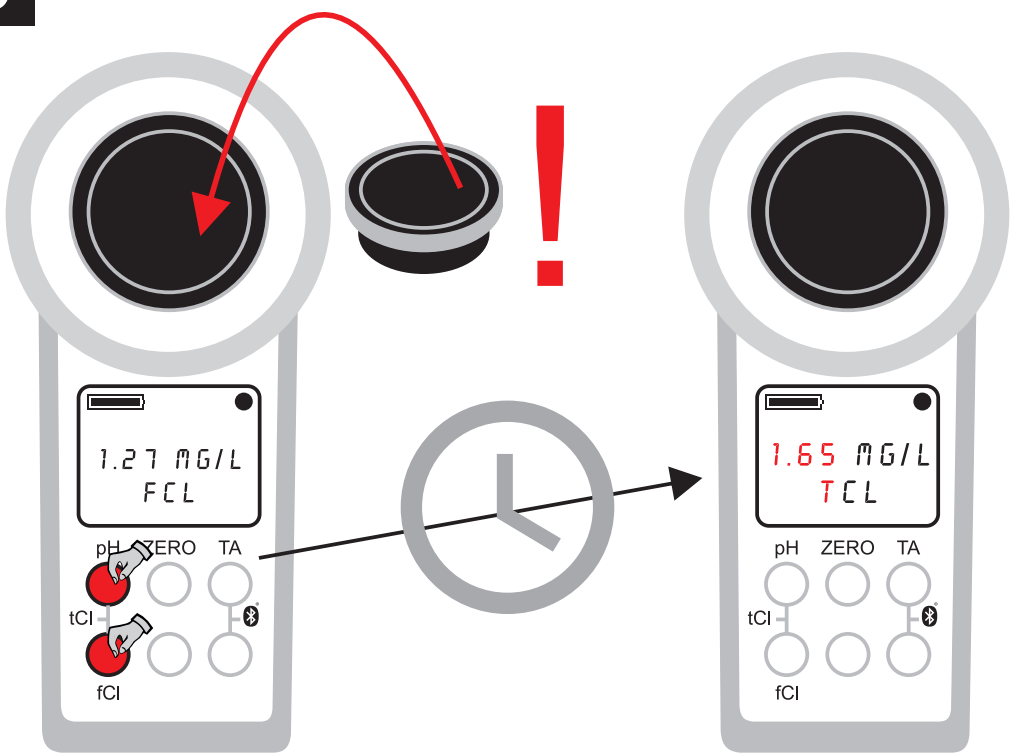
6

DPD N° 3 Photometer



7

8



Total Chlorine is measured directly after free Chlorine without emptying the cuvette. The DPD 3 tablet is added to the sample water which already contains the DPD 1 tablet (dissolved). Combined Chlorine is calculated as Total Chlorine minus free Chlorine.

Le chlore total est mesuré directement après le chlore libre sans vidanger la cuvette. La pastille DPD 3 est ajoutée à l'eau échantillon qui contient déjà la tablette DPD 1 (dissoute). Le chlore combiné est calculé comme le chlore total moins le chlore libre.

El cloro total se mide directamente después de cloro libre, sin necesidad de vaciar la cubeta. La tableta DPD 3 se añade a la cubeta en la que la tableta DPD 1 ya está disuelta. El cloro combinado se calcula a partir de cloro total menos cloro libre.

Gesamt-Chlor wird direkt nach freiem Chlor gemessen, ohne die Küvette zu leeren. Die DPD 3 Tablette wird in die Küvette gegeben, in der bereits die DPD 1 Tablette gelöst ist. Das gebundene Chlor errechnet sich aus Gesamt-Chlor minus freiem Chlor.

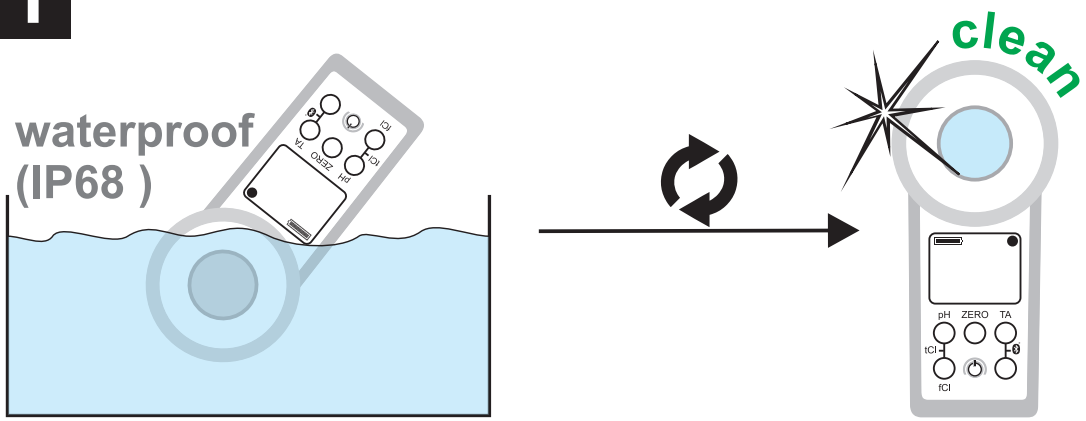
Cloro totale viene misuratao subito dopo cloro libero, senza svuotare la cuvetta. La pasticca DPD 3 è aggiunta alla cuvetta in cui la pasticca DPD 1 è già disciolta. Il cloro combinato è calcolato dal cloro totale meno cloro libero.

Cyanuric Acid
Acide nurique
Ácido cianúrico
Cyanursäure
Acido Cianurico

0 - 160 mg/l (ppm)

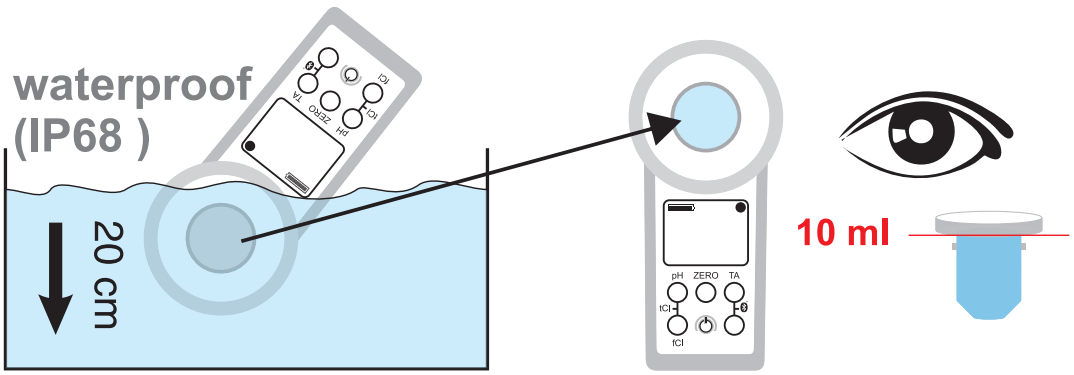
-Test Photometer

1



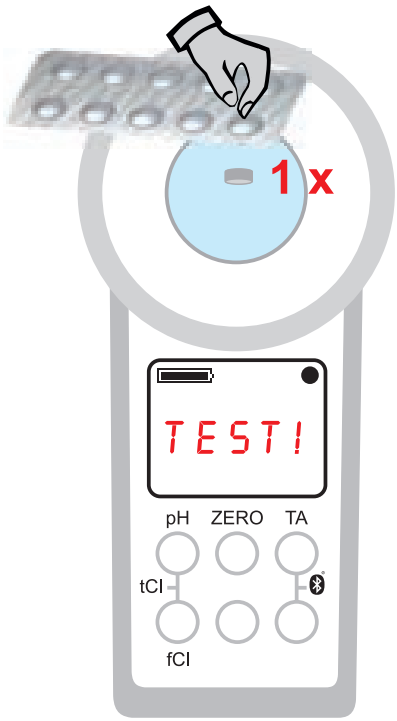
2

take 10 ml water sample

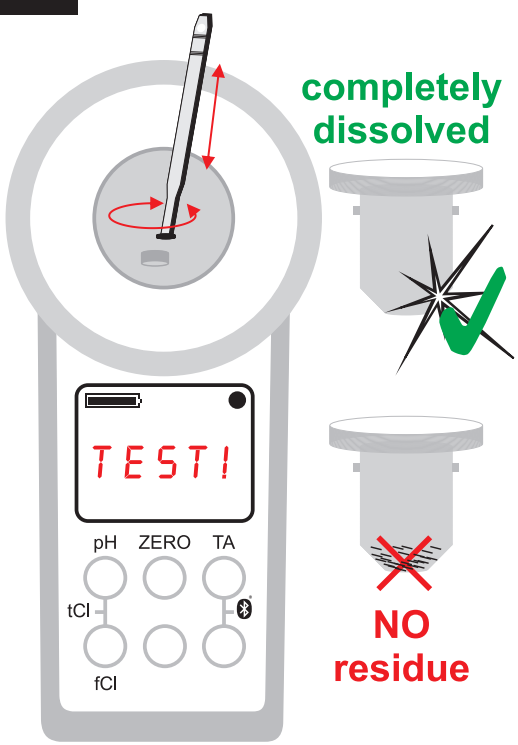


n. Acid • Acide n • Ácido Cian. nursäure • Acido Cianurico

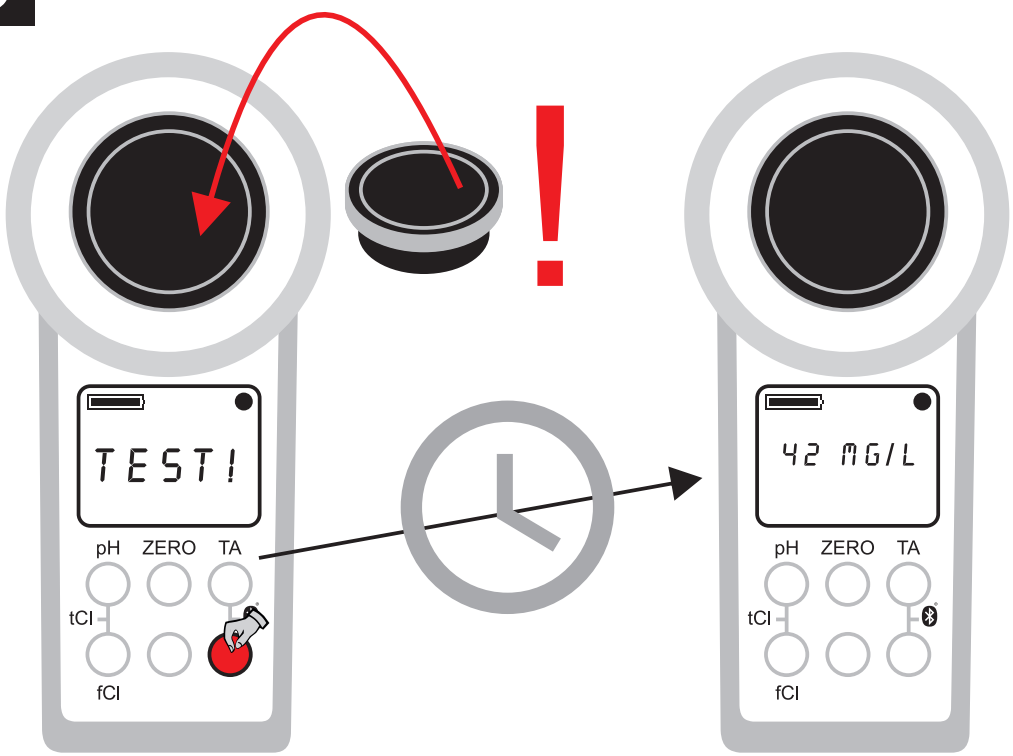
3 -Test Photometer



4



5

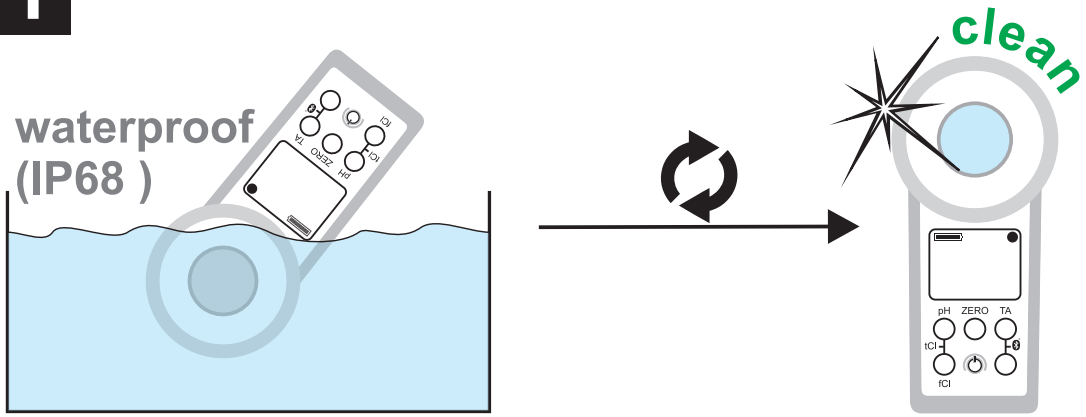


Alkalinity
Alcalinité
Alcalinidad
Alkalinität
Alcalinità

0 - 200 mg/l (ppm) $CaCO_3$

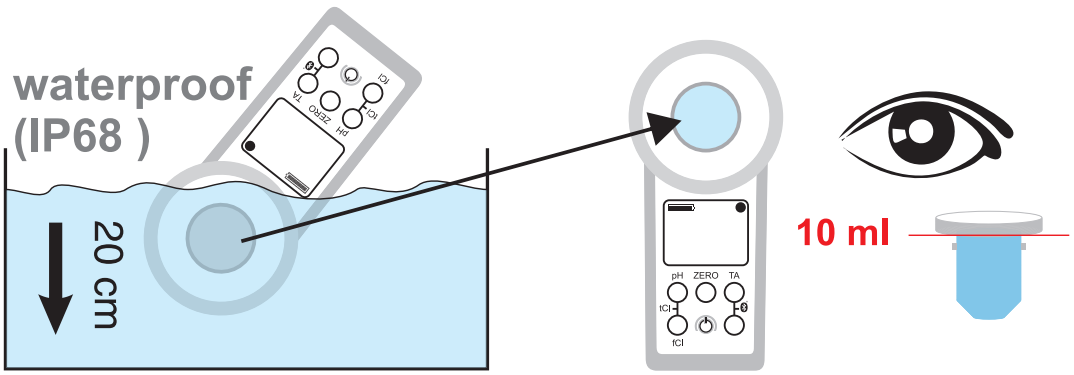
Alkalinity-M Photometer

1



2

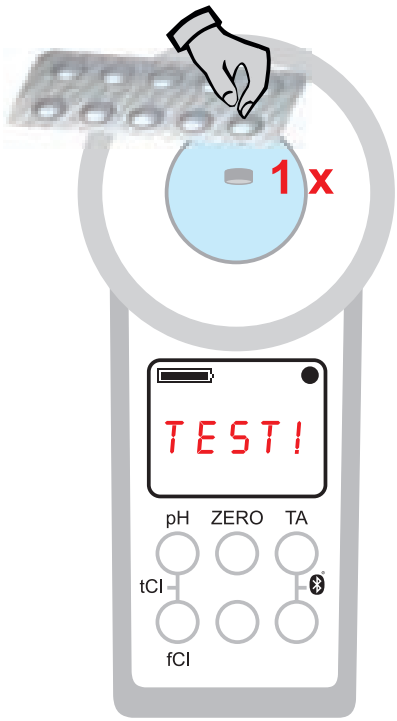
take 10 ml water sample



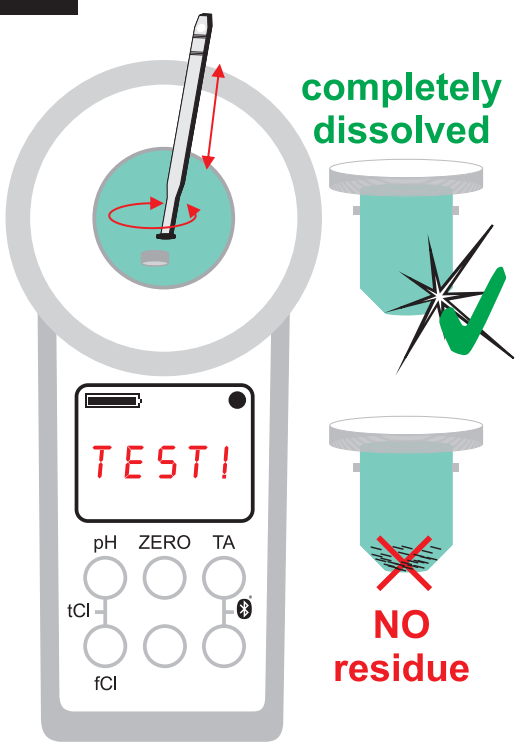
Alkalinity • Alcalinité • Alcalinidad Alkalinität • Alcalinità

3

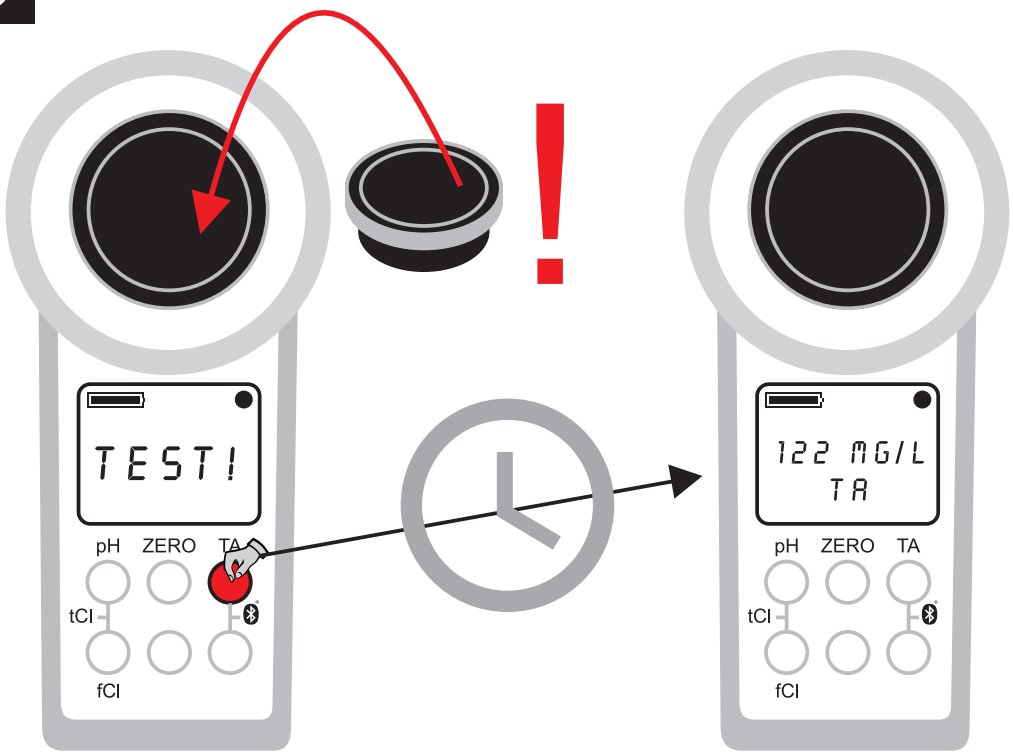
Alkalinity-M Photometer



4



5



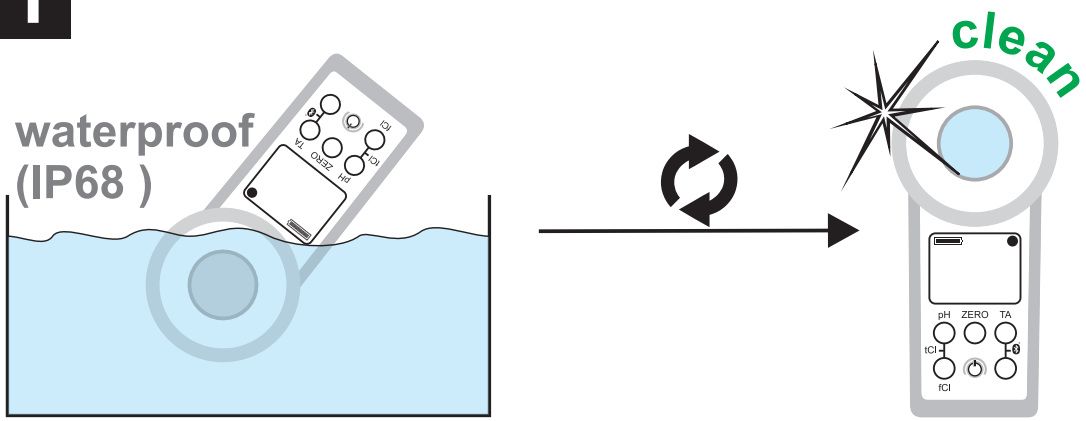
Active Oxygen
Oxygène actif
Oxígeno activo
Aktivsauerstoff
Ossigeno Attivo
(MPS)

0.0 - 30.0 mg/l (ppm)

*DPD N° 4 Photometer**

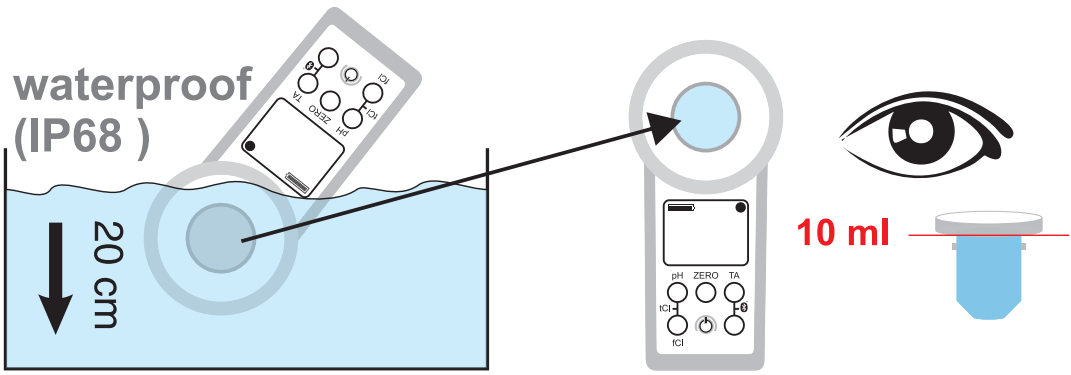
1

**not part of standard equipment*



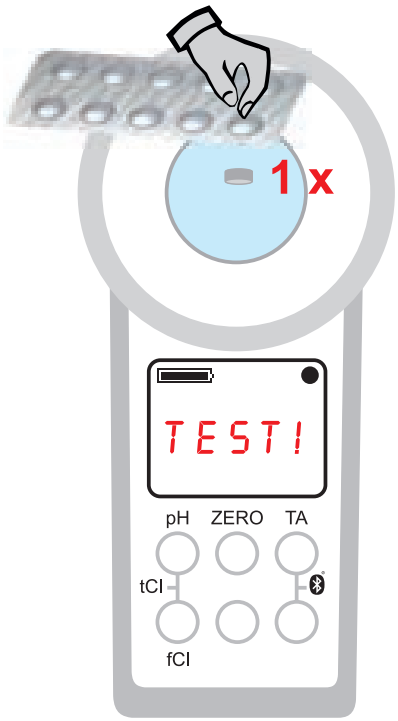
2

take 10 ml water sample

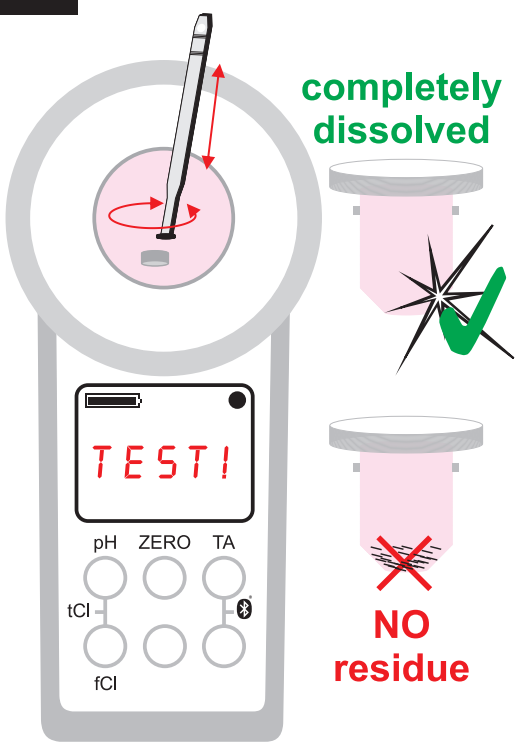


3

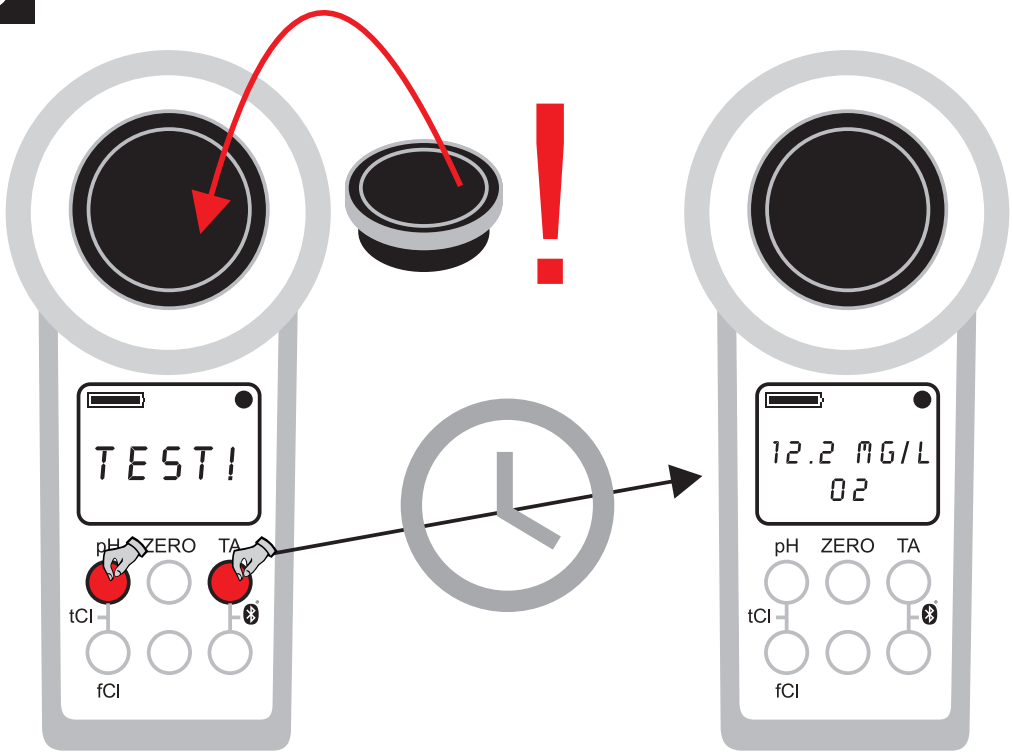
DPD N° 4
Photometer*



4



5



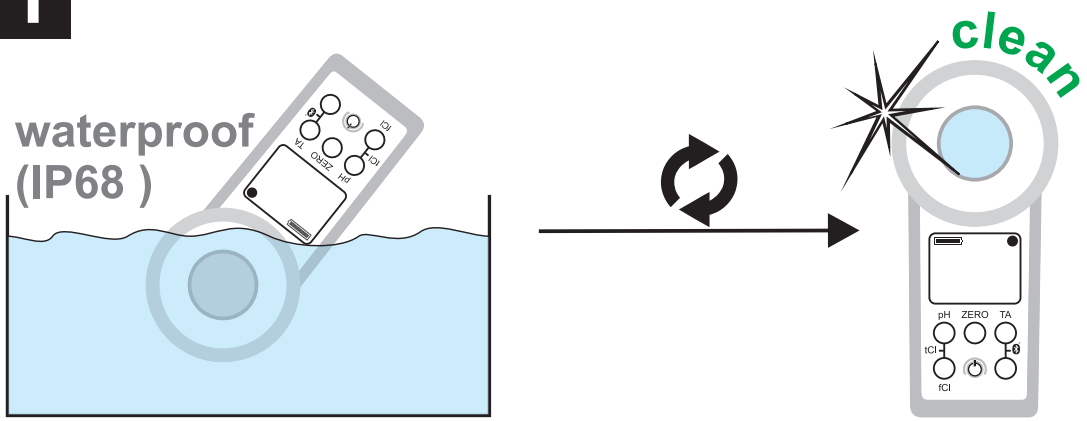
Chlorine Dioxide
Dioxyde de Chlore
Dióxido de cloro
Chlordioxid
Biossido di Cloro

0.00 - 11.40 mg/l (ppm)

DPD N° 1 Photometer
*Glycine**

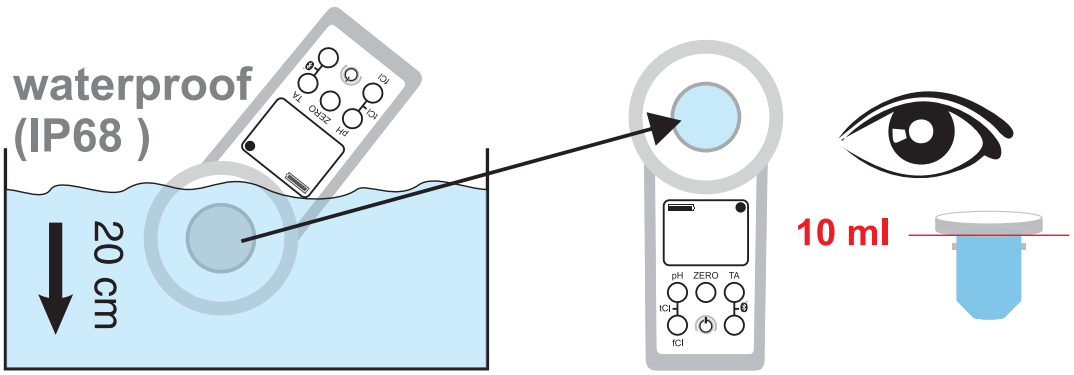
1

**not part of standard equipment*



2

take 10 ml water sample



Cl.Dioxide • Dioxyde de Cl • Dióxido de Cl Chlordioxid • Biossido di Cl

Only if your water sample does contain Chlorine next to Chlorine Dioxide (both disinfectants used), the following procedure "A" needs to be followed and Glycine* reagent needs to be used. Otherwise (only Chlorine Dioxide present), please follow procedure "B".

Seulement si votre échantillon d'eau contient du chlore avec du dioxyde de chlore (les deux désinfectants utilisés), la procédure suivante «A» doit être suivie et le réactif Glycine * doit être utilisé. Sinon (seul le dioxyde de chlore présent sans Chlore), suivez la procédure «B».

Sólo cuando la muestra de agua contiene dióxido de cloro y cloro (se han utilizado ambos desinfectantes), debe ser aplicado el método "A" usando la tableta de glicina. Si la muestra contiene únicamente dióxido de cloro y no contiene cloro, por favor seguir el método "B".

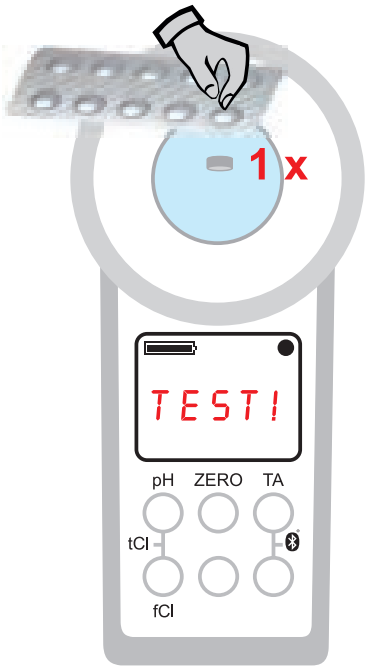
Nur wenn die Wasserprobe neben Chlordioxid auch Chlor enthält (beide Desinfektionsmittel wurden benutzt), muss das Verfahren "A" angewendet und die Glycine Tablette verwendet werden. Falls die Probe nur Chlordioxid und kein Chlor enthält, bitte dem Verfahren "B" folgen.

Solo quando il campione di acqua contiene biossido di cloro e cloro (entrambi disinfettanti vengono usati), deve essere utilizzato il metodo "A" e la pasticca Glycine deve essere applicata. Se il campione contiene solo biossido di cloro e non contiene cloro, si prega la procedura metodo "B".

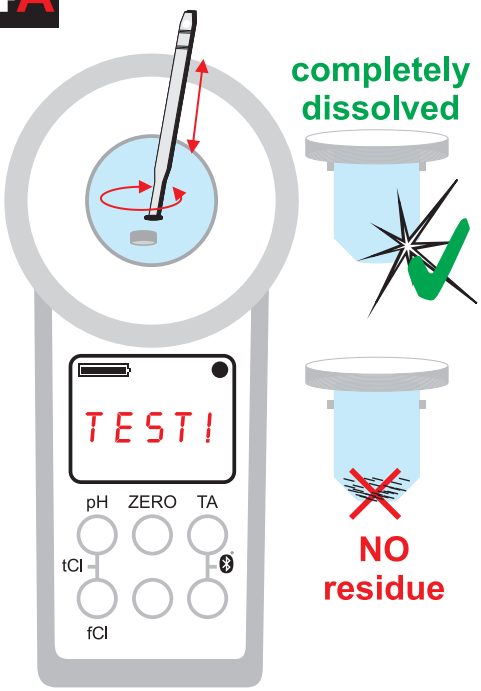
Cl.Dioxide • Dioxyde de Cl • Dióxido de Cl Chlordioxid • Biossido di Cl

A With Chlorine / Avec du Chlore / Con Cloro / Mit Chlor / Con il Cloro

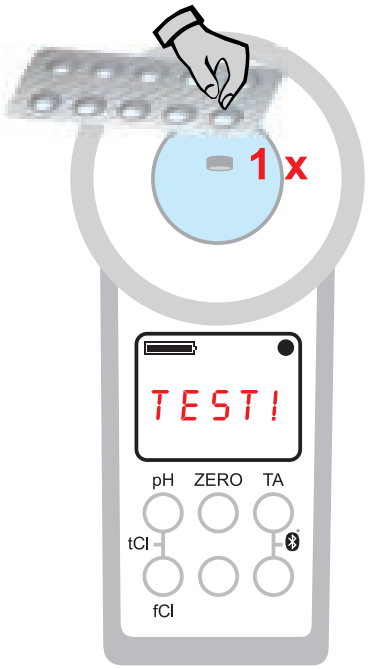
3A Glycine*



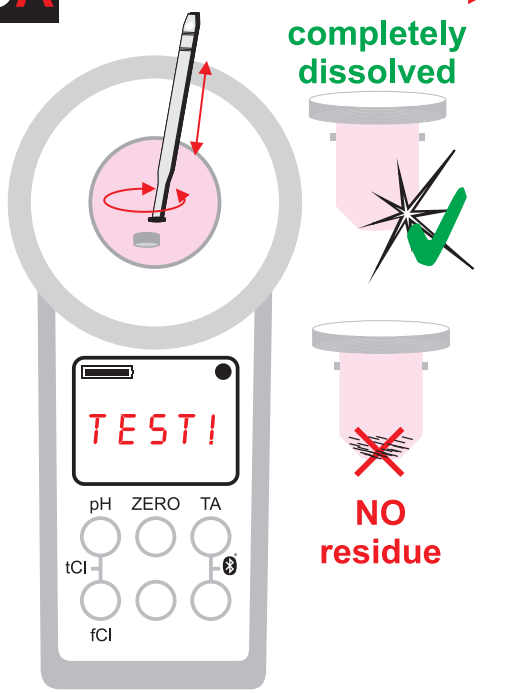
4A



5A DPD N° 1 Photometer



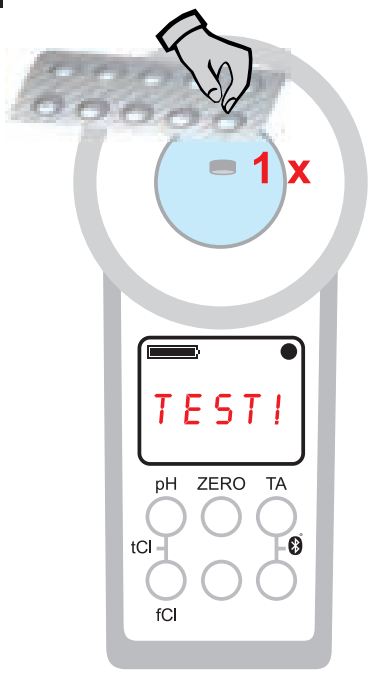
6A



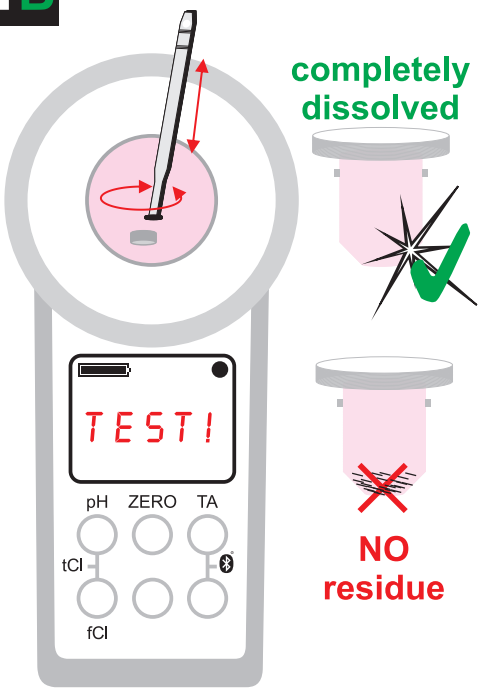
Cl.Dioxide • Dioxyde de Cl • Dióxido de Cl Chlordioxid • Biossido di Cl

B Without Chlorine / Sans Chlore / Sin Cloro / Ohne Chlor / Senza Cloro

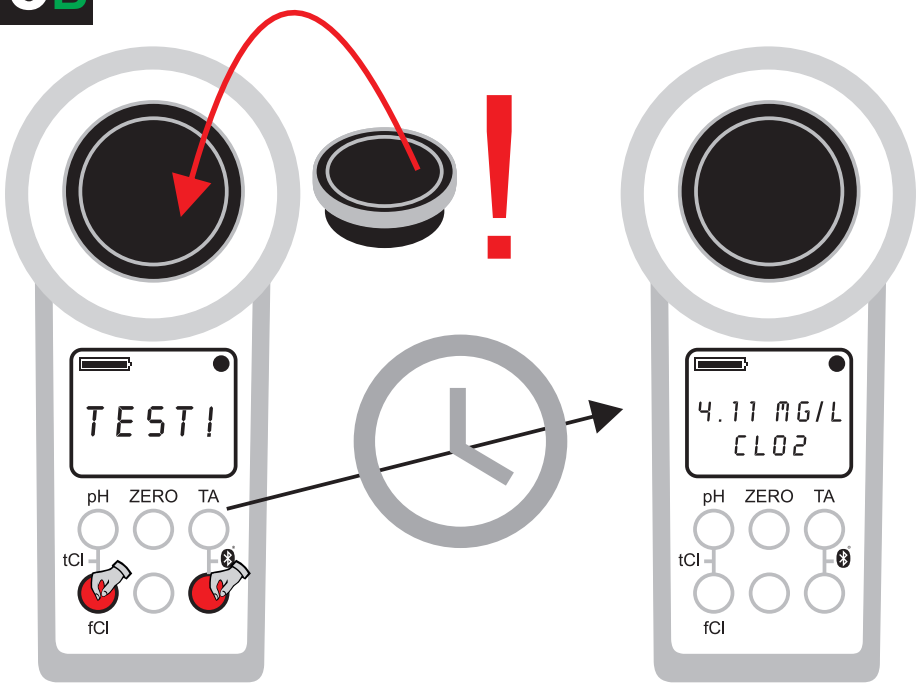
3B DPD N° 1 Photometer



4B



7A/5B



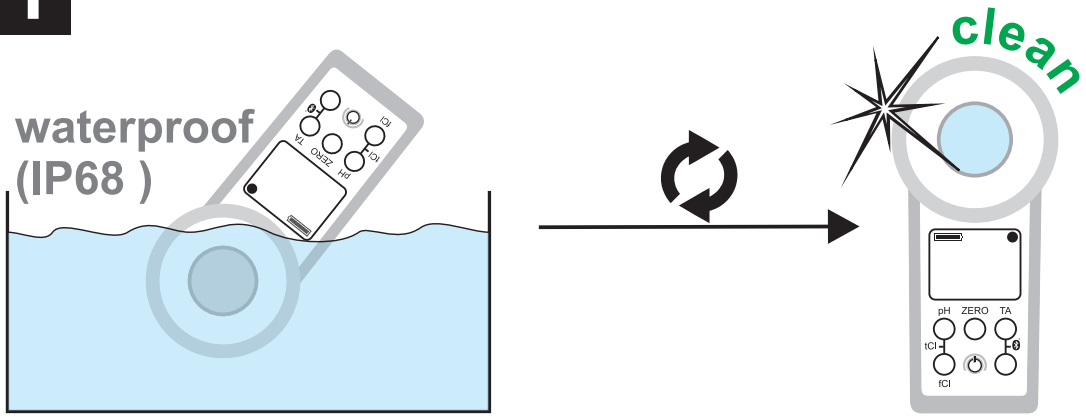
Bromine
Brome
Bromo
Brom
Bromo

0.0 - 13.5 mg/l (ppm)

DPD N° 1 Photometer
*Glycine**

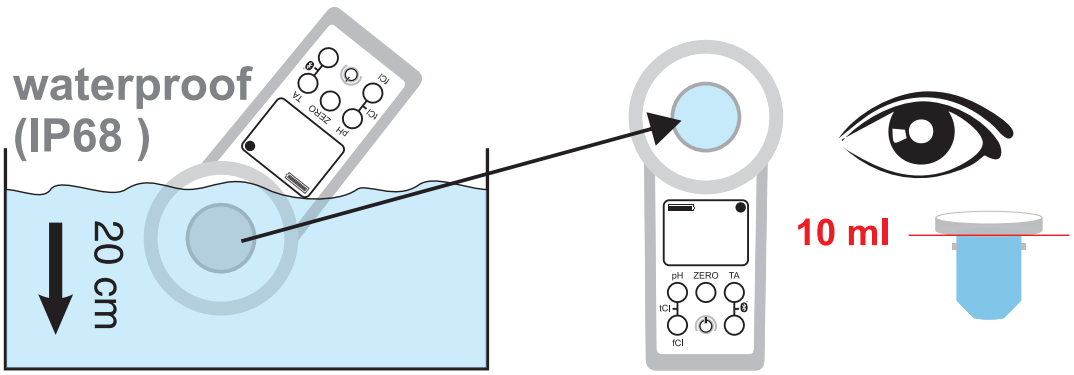
*not part of standard equipment

1



2

take 10 ml water sample



Bromine • Brome • Bromo
Brom • Bromo

Only if your water sample does contain Chlorine next to Bromine (both disinfectants used), the following procedure "A" needs to be followed and Glycine* reagent needs to be used. Otherwise (only Bromine present), please follow procedure "B"

Seulement si votre échantillon d'eau contient du chlore avec du Brome (les deux désinfectants utilisés), la procédure suivante «A» doit être suivie et le réactif Glycine * doit être utilisé. Sinon (seul le Brome présent sans Chlore), suivez la procédure «B».

Sólo cuando la muestra de agua contiene Bromo y cloro (se han utilizado ambos desinfectantes), debe ser aplicado el método "A" usando la tableta de glicina. Si la muestra contiene únicamente Bromo y no contiene cloro, por favor seguir el método "B".

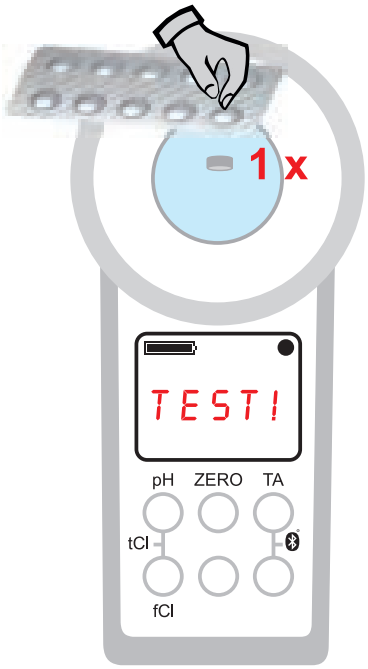
Nur wenn die Wasserprobe neben Brom auch Chlor enthält (beide Desinfektionsmittel wurden benutzt), muss das Verfahren "A" angewendet und die Glycine Tablette verwendet werden. Falls die Probe nur Brom und kein Chlor enthält,
bitte dem Verfahren "B" folgen.

Solo quando il campione di acqua contiene Bromo e cloro (entrambi disinfettanti vengono usati), deve essere utilizzato il metodo "A" e la pasticca Glycine deve essere applicata. Se il campione contiene solo Bromo e non contiene cloro, si prega la procedura metodo "B".

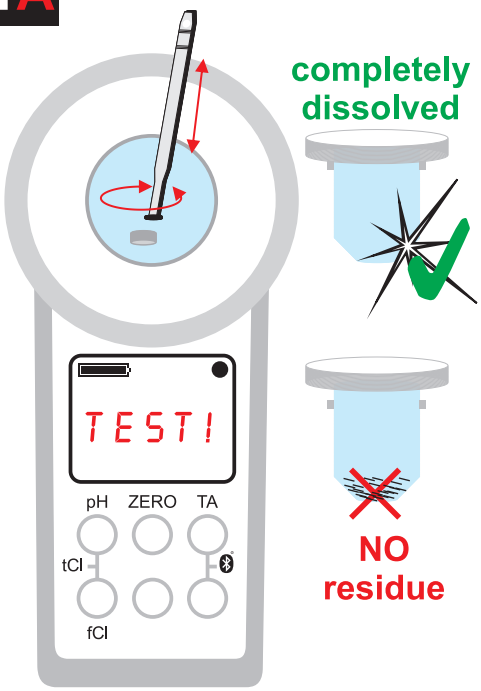
Bromine • Brome • Bromo
Brom • Bromo

A With Chlorine / Avec du Chlore / Con Cloro / Mit Chlor / Con il Cloro

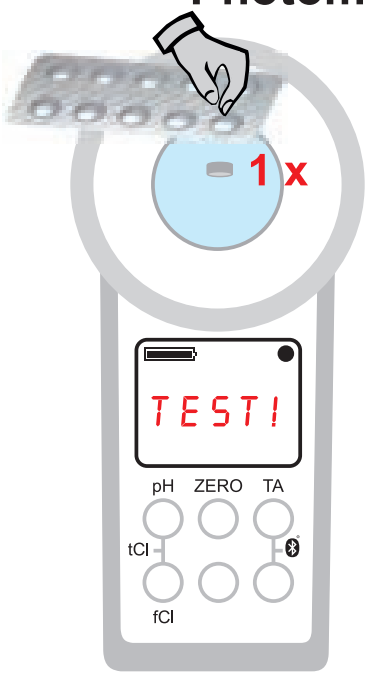
3A Glycine*



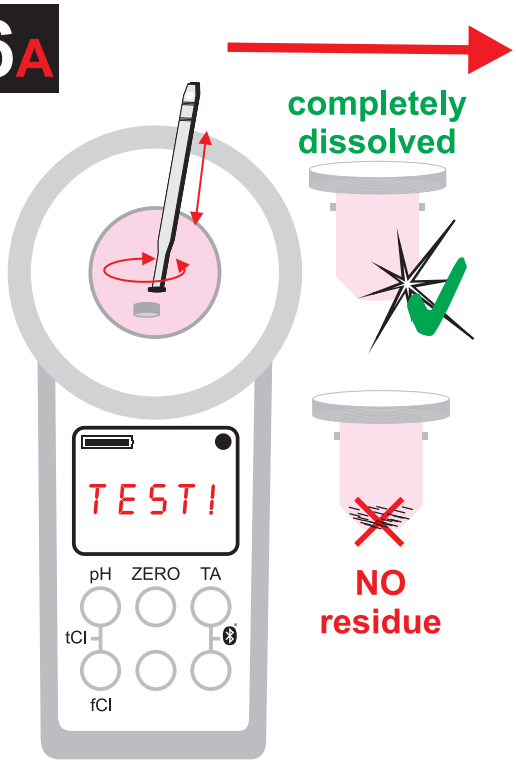
4A



5A DPD N° 1 Photometer



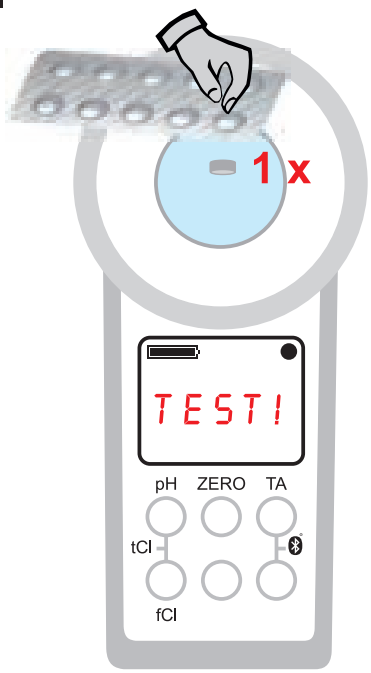
6A



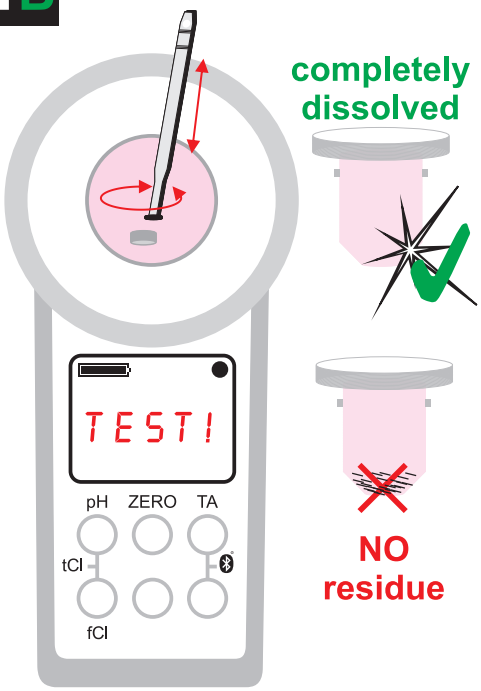
Bromine • Brome • Bromo
Brom • Bromo

B Without Chlorine / Sans Chlore / Sin Cloro / Ohne Chlor / Senza Cloro

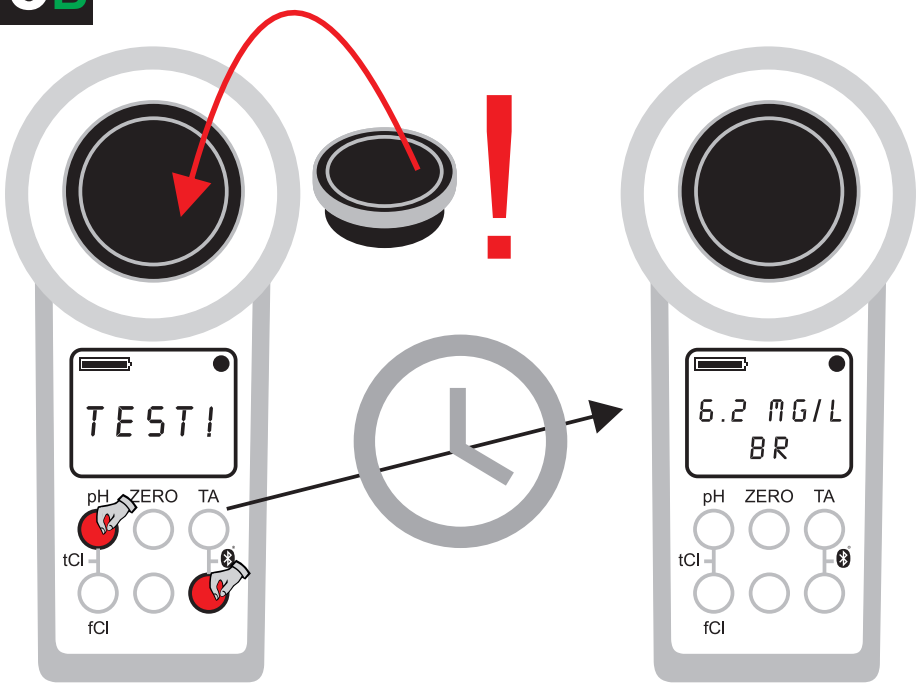
3B DPD N° 1 Photometer



4B



7A/5B



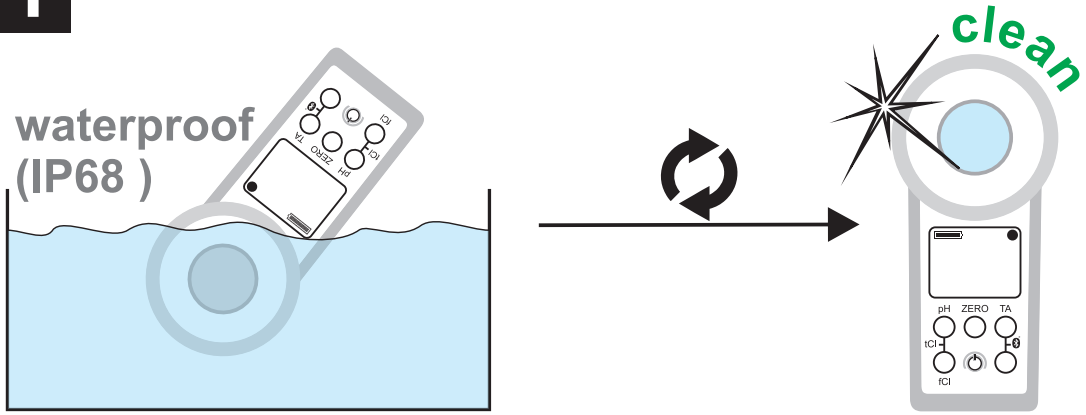
Ozone
Ozono
Ozon

0.00 - 4.00 mg/l (ppm)

DPD N° 1 Photometer
DPD N° 3 Photometer
*Glycine**

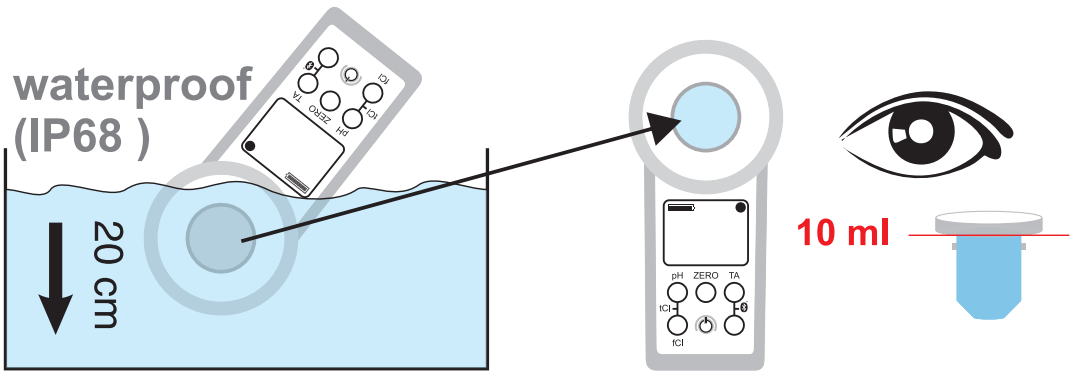
*not part of standard equipment

1



2

take 10 ml water sample



Ozone • Ozono • Ozon

Only if your water sample does contain Ozone next to Chlorine (both disinfectants used), the following procedure "B" needs to be followed and Glycine* reagent needs to be used. Otherwise (only Ozone present), please follow procedure "A".

Seulement si votre échantillon d'eau contient du chlore avec de l' Ozone (les deux désinfectants utilisés), la procédure suivante «B» doit être suivie et le réactif Glycine* doit être utilisé. Sinon (seul Ozone présent sans Chlore), suivez la procédure «A».

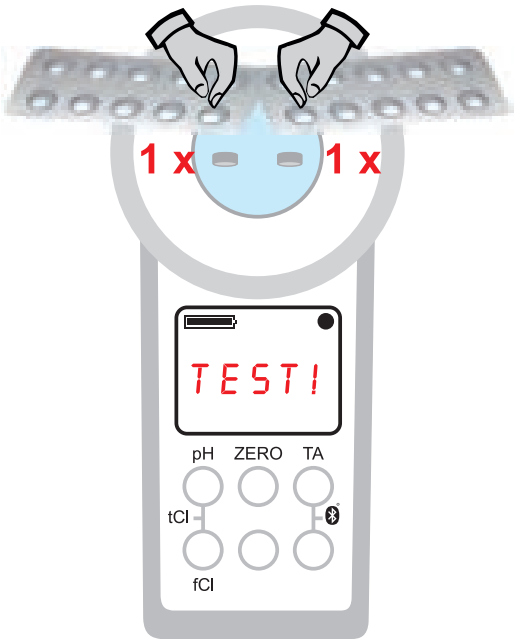
Sólo cuando la muestra de agua contiene Ozono y cloro (se han utilizado ambos desinfectantes), debe ser aplicado el método "B" usando la tableta de glicina*. Si la muestra contiene únicamente Ozono y no contiene cloro, por favor seguir el método "A".

Nur wenn die Wasserprobe neben Ozon auch Chlor enthält (beide Desinfektionsmittel wurden benutzt), muss das Verfahren "B" angewendet und die Glycine* Tablette verwendet werden. Falls die Probe nur Ozon und kein Chlor enthält, bitte dem Verfahren "A" folgen.

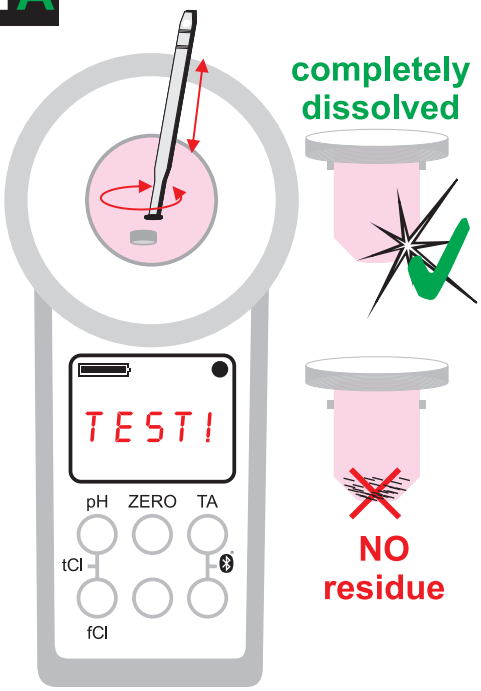
Solo quando il campione di acqua contiene Ozono e cloro (entrambi disinfettanti vengono usati), deve essere utilizzato il metodo "B" e la pasticca Glycine* deve essere applicata. Se il campione contiene solo Ozono e non contiene cloro, si prega la procedura metodo "A".

A Without Chlorine / Sans Chlore / Sin Cloro / Ohne Chlor / Senza Cloro

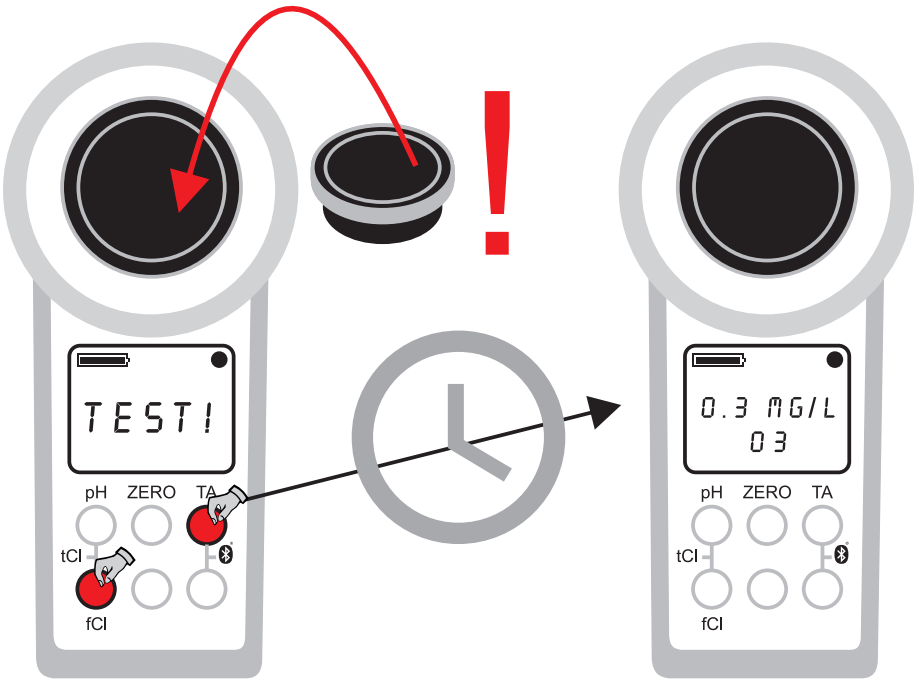
3A DPD N°1 & DPD N°3 (Photometer)



4A

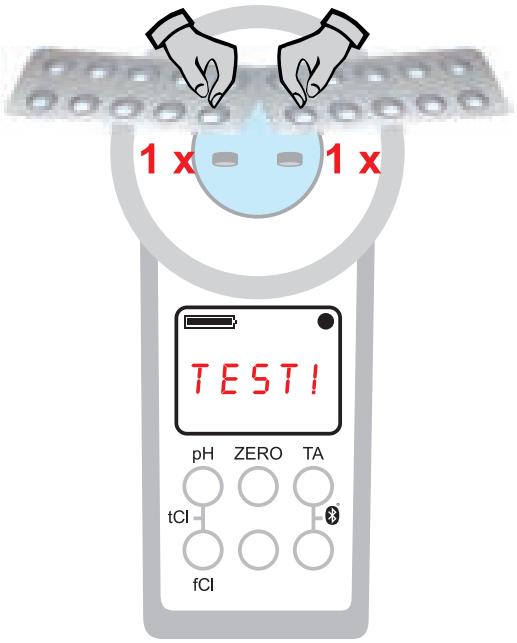


5A

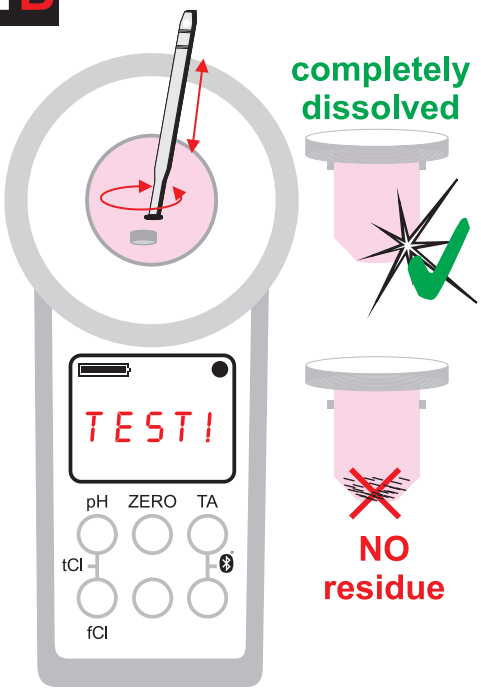


B With Chlorine / Avec du Chlore / Con Cloro / Mit Chlor / Con il Cloro

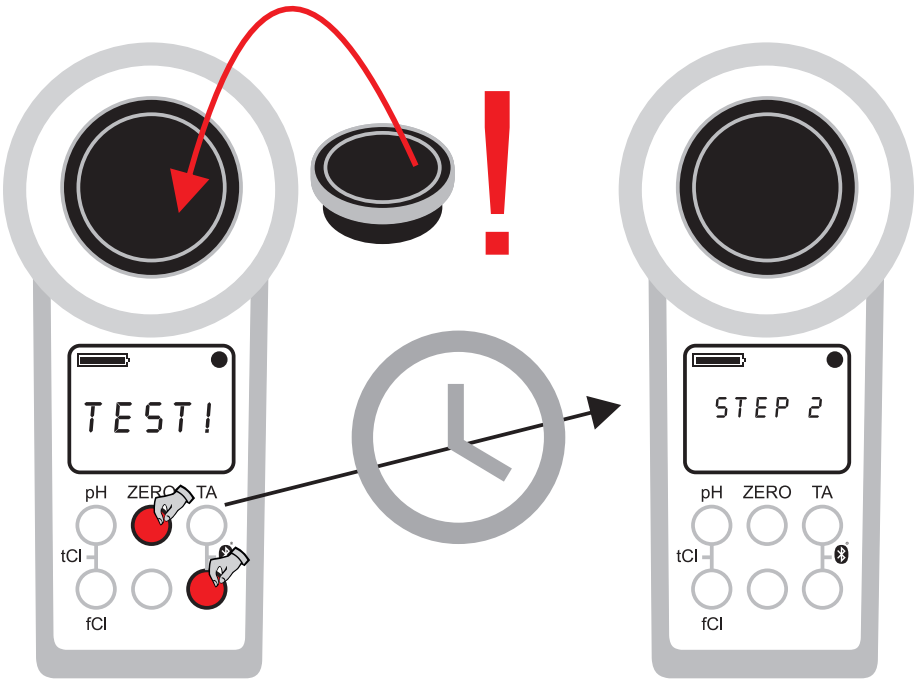
3B DPD N°1 & DPD N°3 (Photometer)



4B

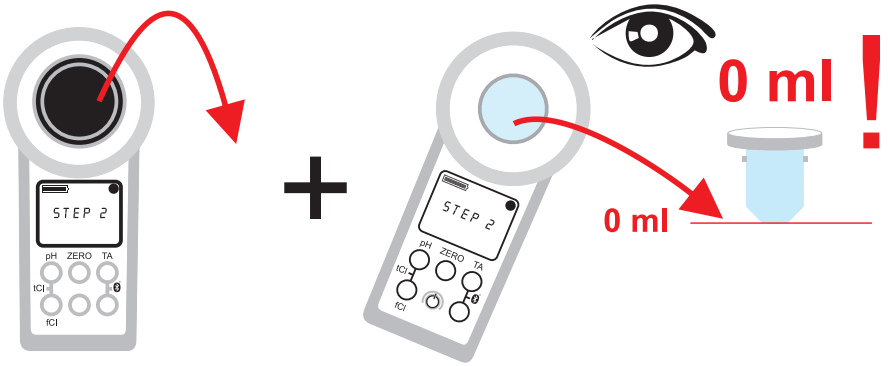


5B

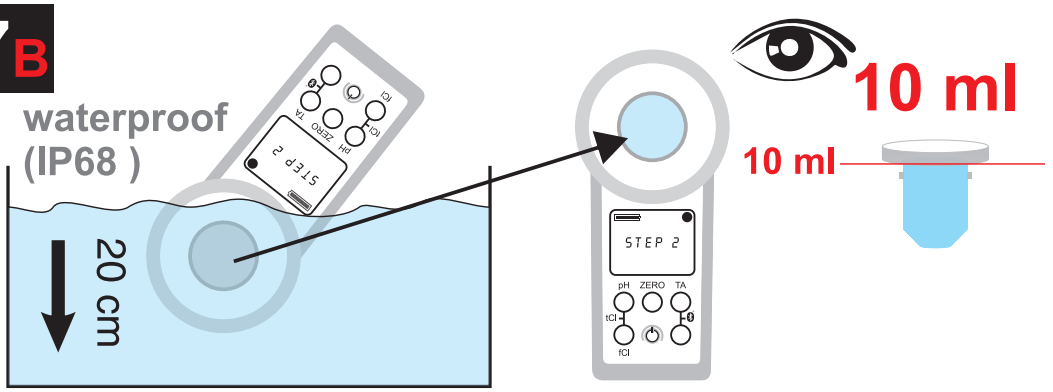


B With Chlorine / Avec du Chlore / Con Cloro / Mit Chlor / Con il Cloro

6B

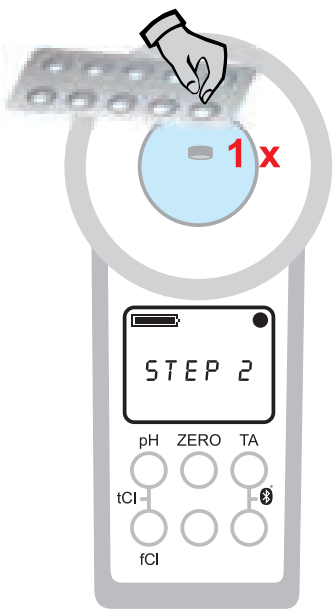


7B

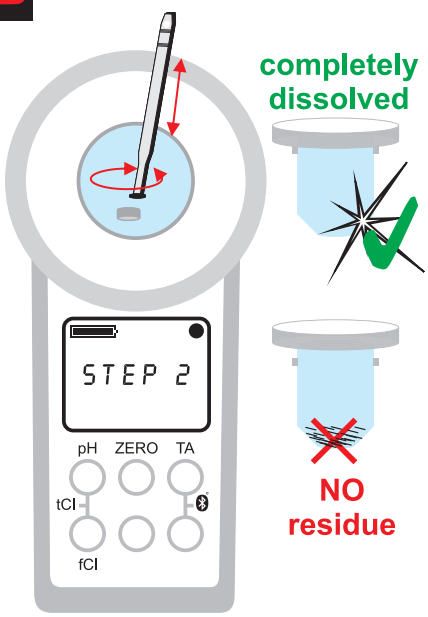


8B

Glycine*

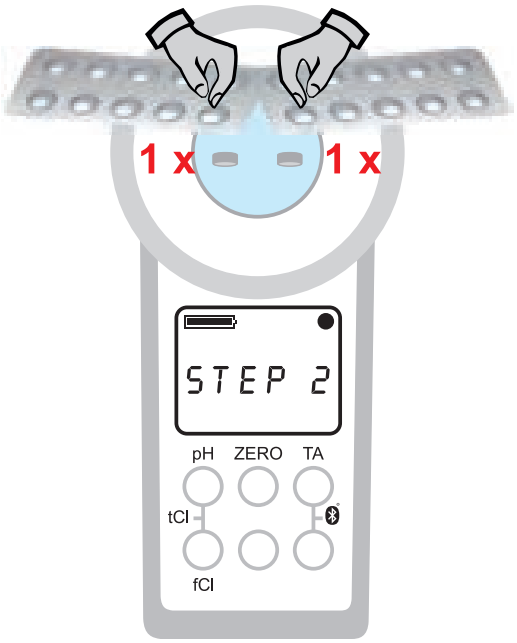


9B

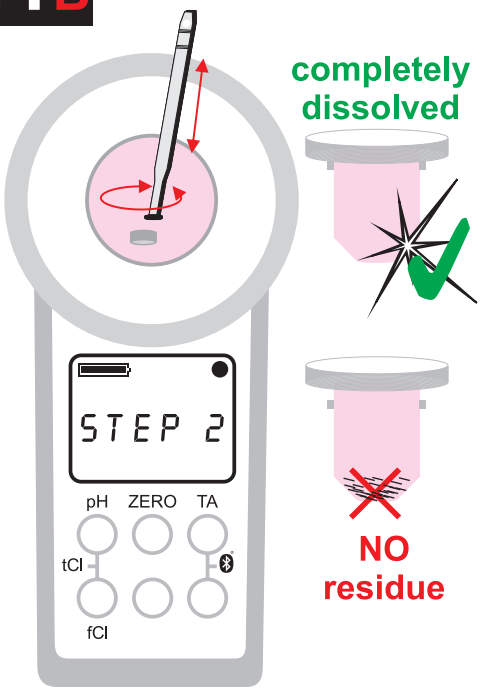


B With Chlorine / Avec du Chlore / Con Cloro / Mit Chlor / Con il Cloro

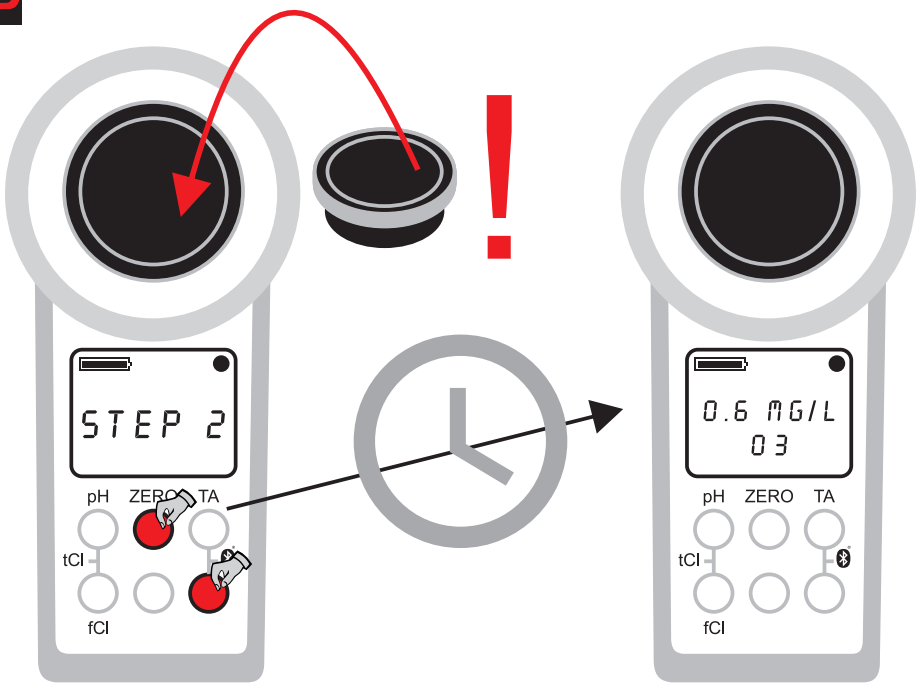
10B DPD N°1 & DPD N°3 (Photometer)



11B



12B



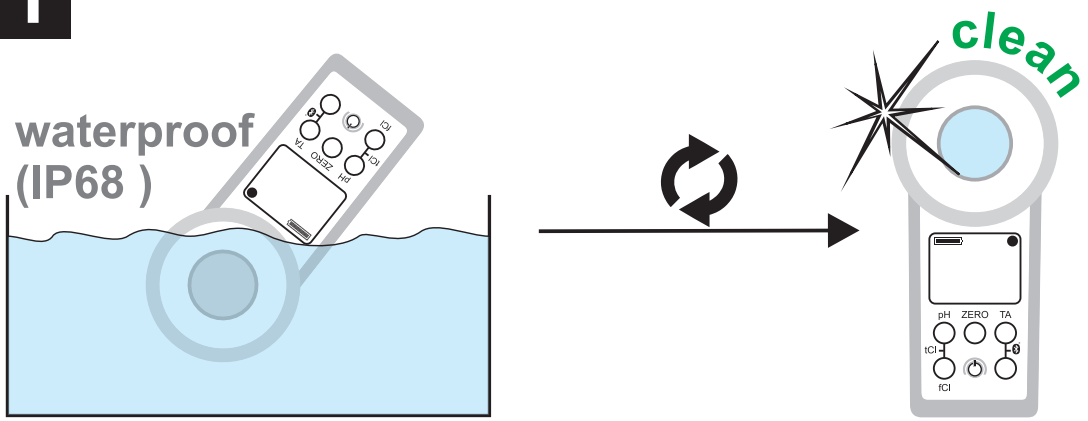
Hydrogen Peroxide
Peroxyde d'Hydrogène
Peróxido de Hidrógeno
Wasserstoffperoxid
Perossido di Idrogeno
(LR)

0.00 - 2.90 mg/l (ppm)

*Hyd. Peroxide LR Photometer**

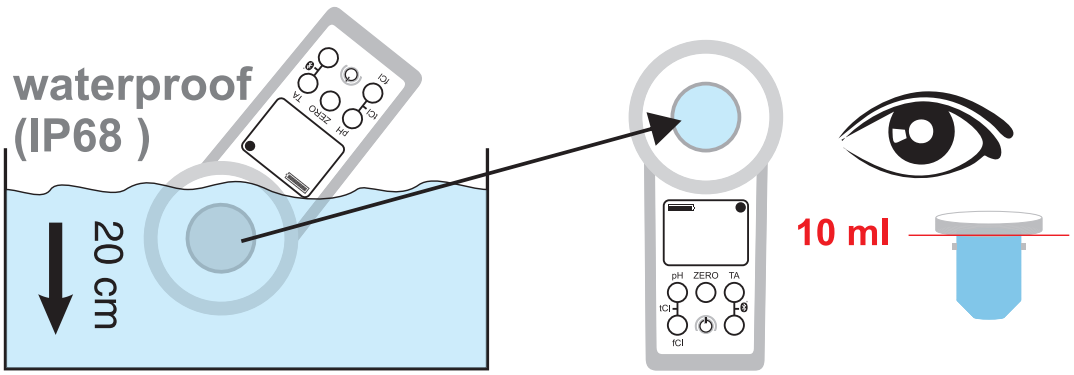
1

**not part of standard equipment*



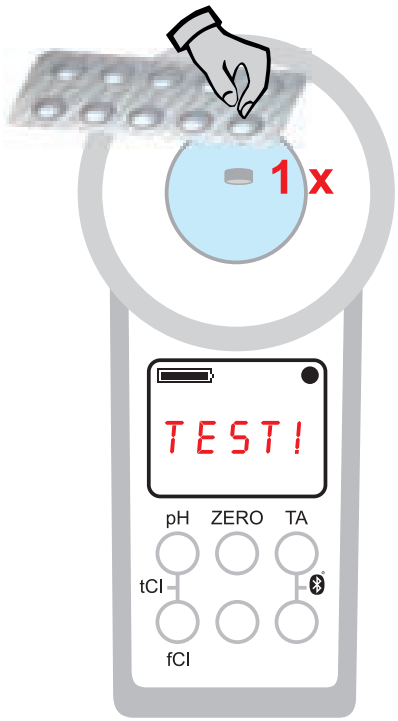
2

take 10 ml water sample

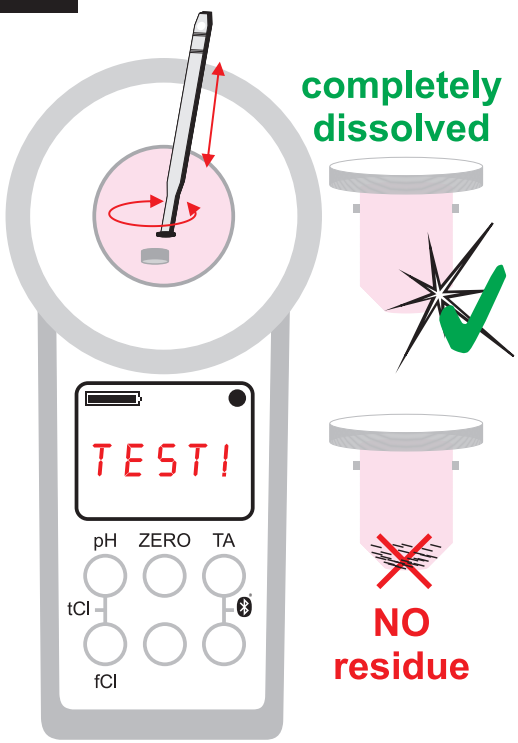


Hyd. Perox. • Perox. d'hyd. • Peróx. de Hidr. Wasserstoffperox. • Peross. di Idrog.

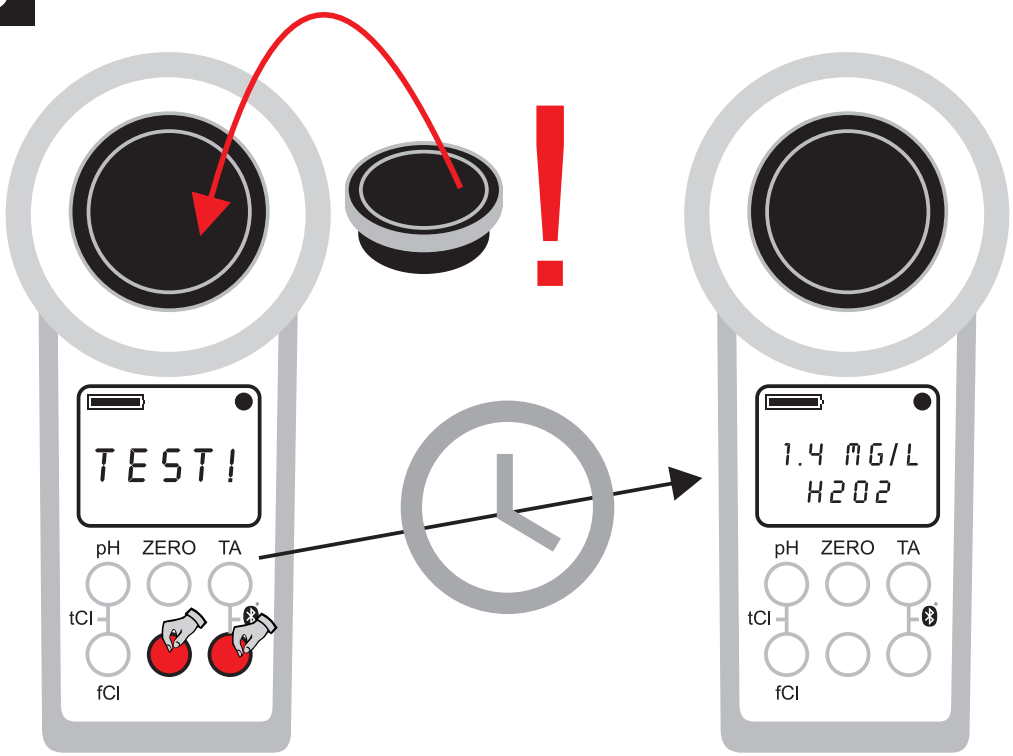
3 Hyd. Peroxide LR Photometer*



4



5



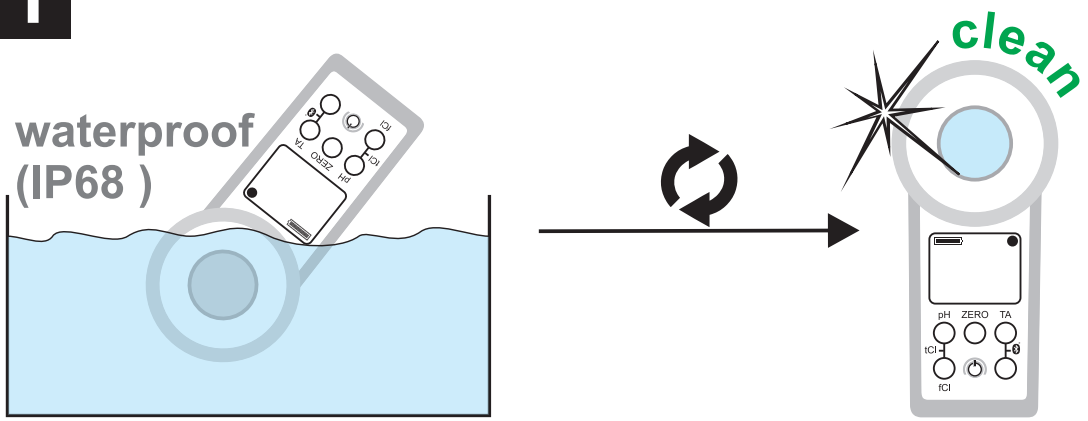
Hydrogen Peroxide
Peroxyde d'Hydrogène
Peróxido de Hidrógeno
Wasserstoffperoxid
Perossido di Idrogeno
(HR)

0 - 200 mg/l (ppm)

*Hyd. Peroxide HR Phot.**
*Acidifying PT**

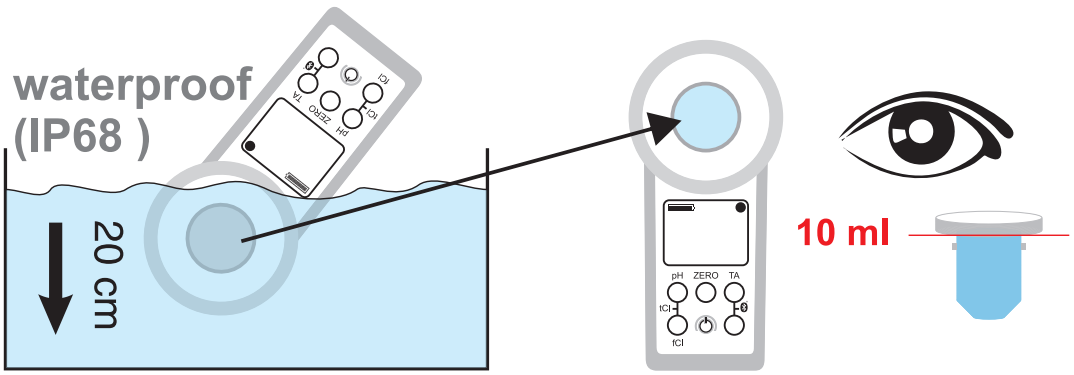
*not part of standard equipment

1

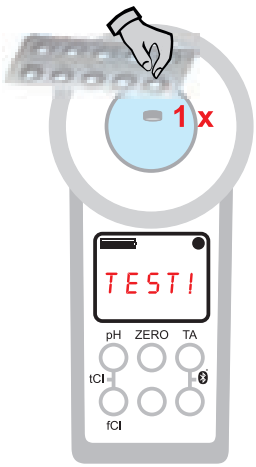


2

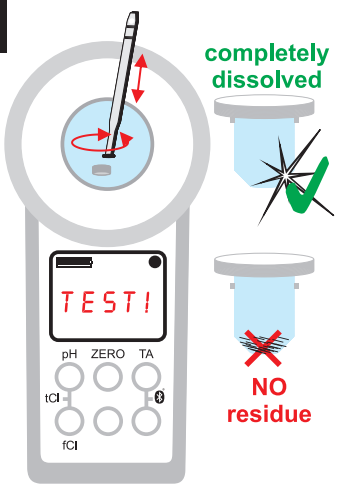
take 10 ml water sample



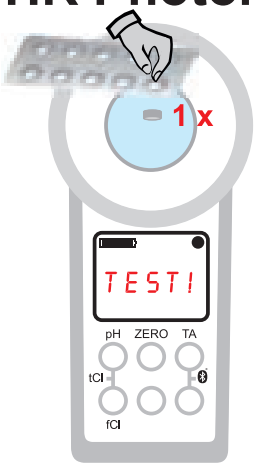
3 Acidifying PT*



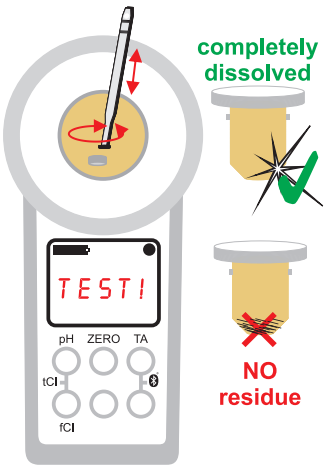
4



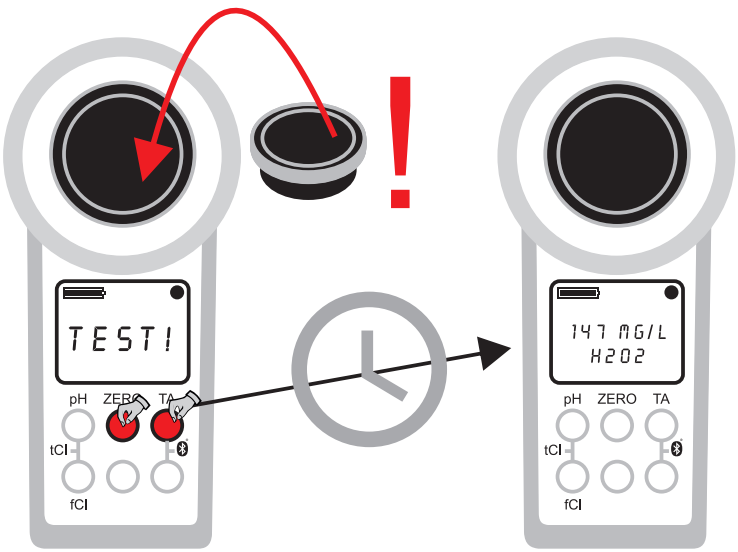
5 Hyd. Peroxide HR Photometer*



6



7



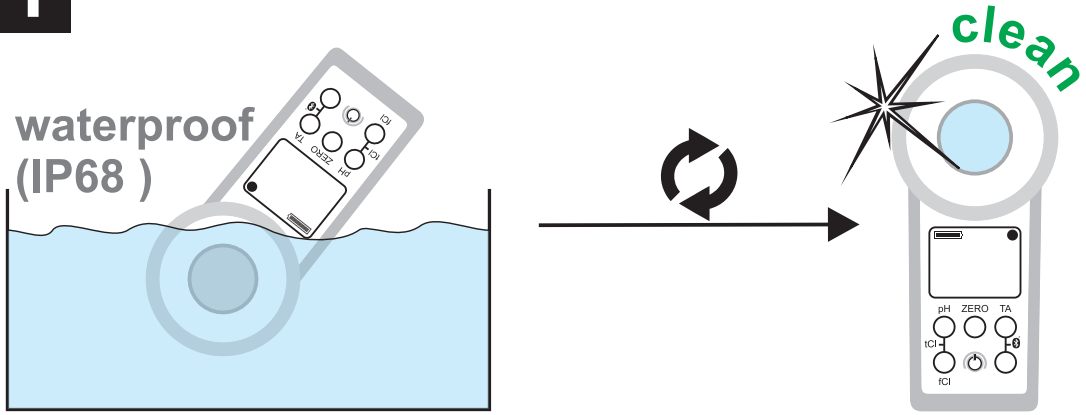
Total Hardness
Dureté Totale
Dureza Total
Gesamthärte
Durezza Totale

0 - 500 mg/l (ppm)

*POL20TH1**
*POL10TH2**

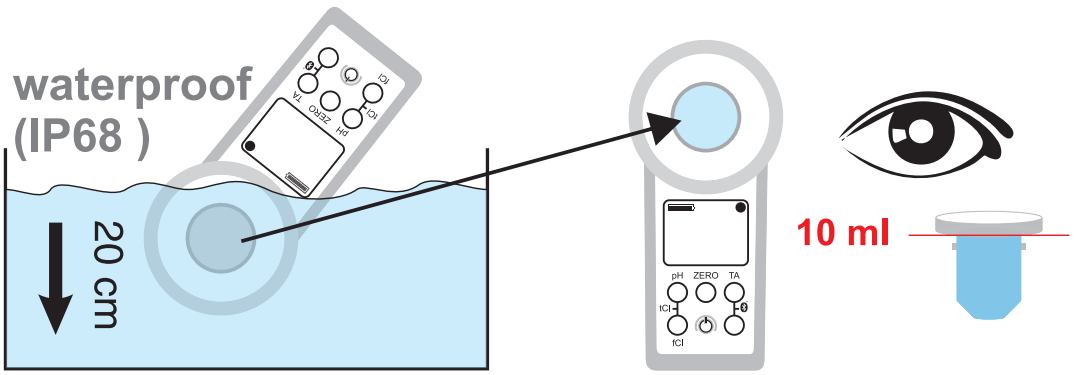
*not part of standard equipment

1



2

take 10 ml water sample

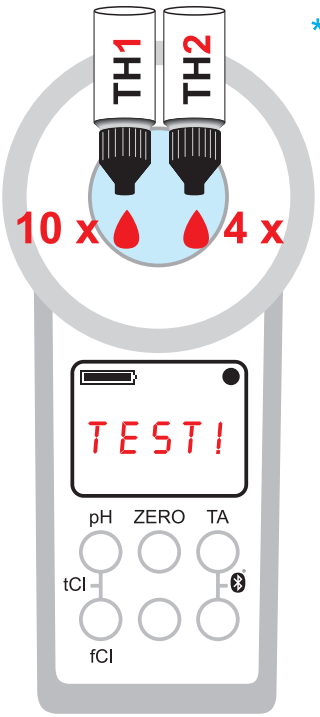


Total Hardn. • Dureté Totale • Dureza Total Gesamthärte • Durezza Totale

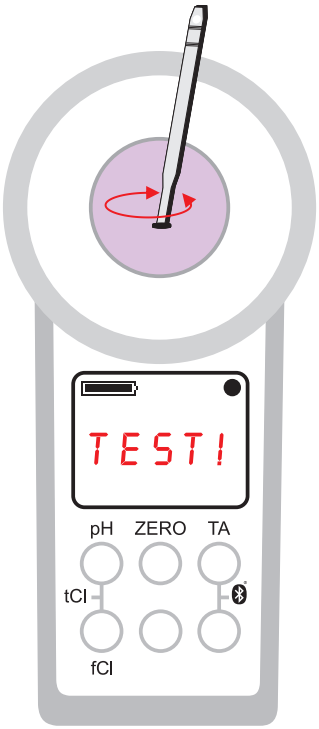
3

POL20TH1*
POL10TH2*

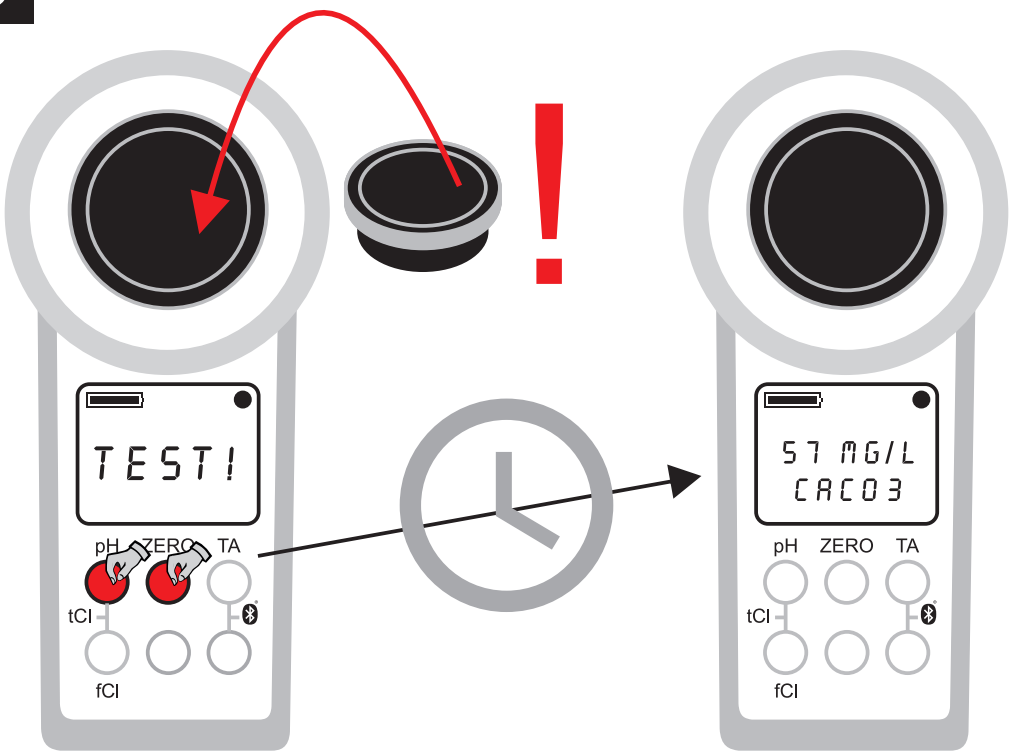
*shake before use!



4



5



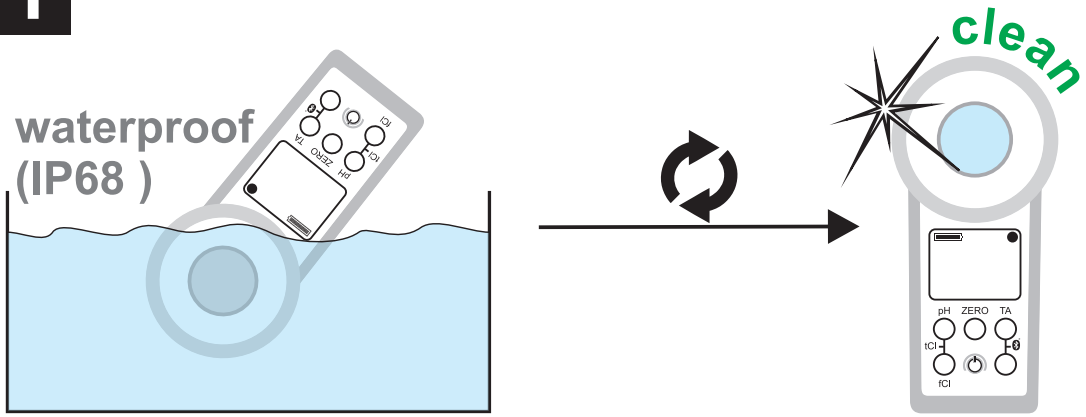
Calcium Hardness
Dureté Calcique
Dureza de Calcio
Kalziumhärte
Durezza del Calcio

0 - 500 mg/l (ppm)

*POL20CaH1**
*POL20CaH2**

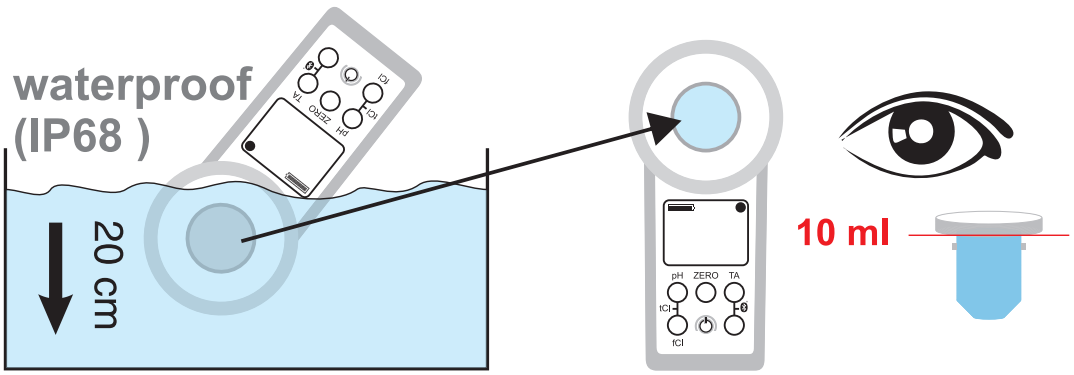
*not part of standard equipment

1



2

take 10 ml water sample

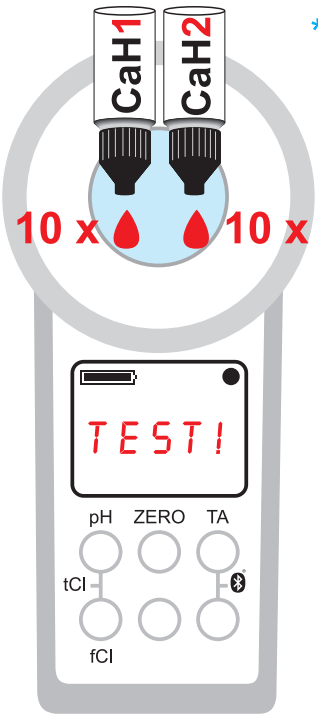


Calcium Hard. • Dureté Calcique • Dureza de Calcio • Kalziumhärte • Durezza del Calcio

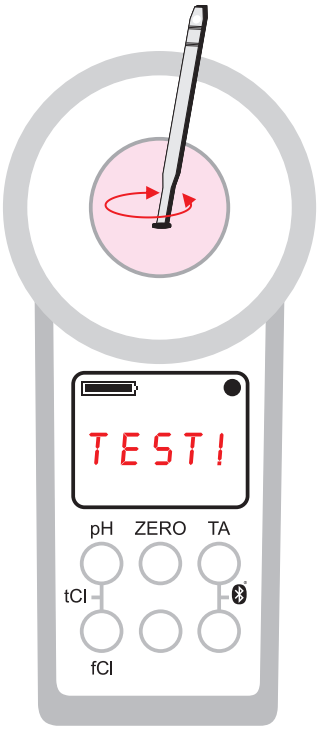
3

POL20CaH1*
POL20CaH2*

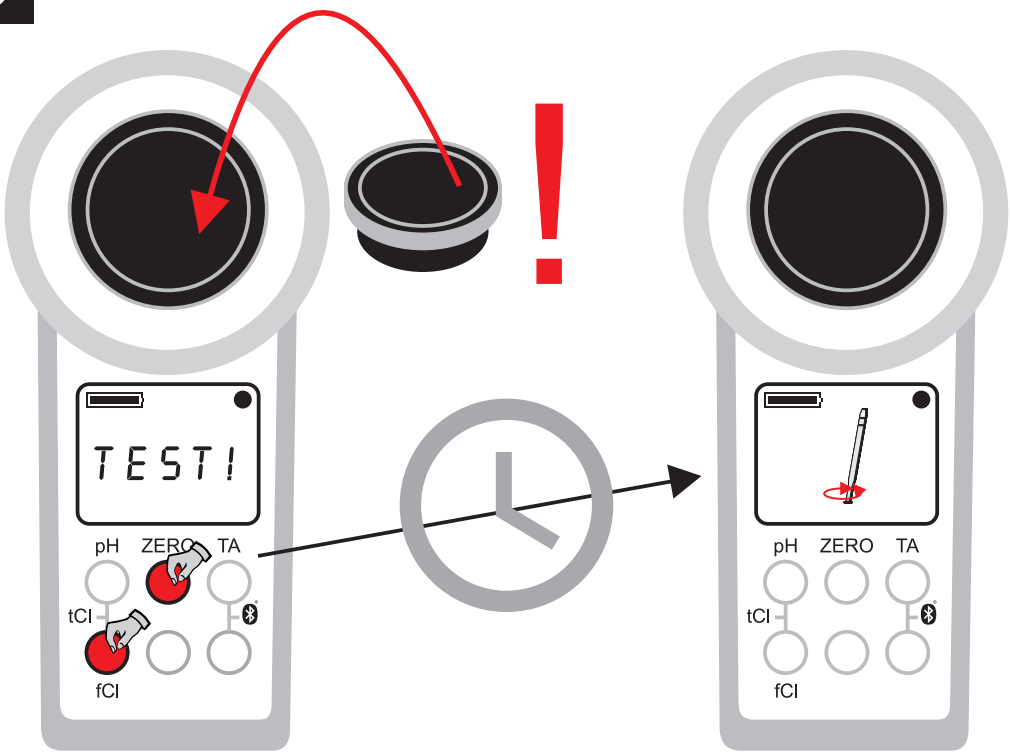
*shake before use!



4

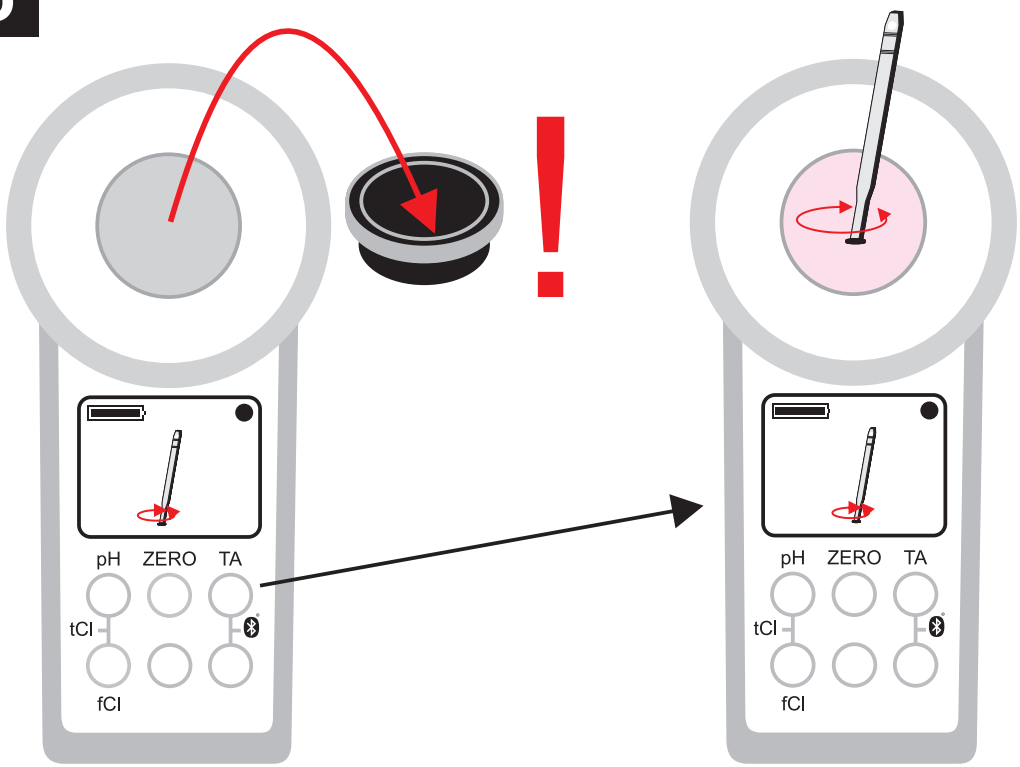


5

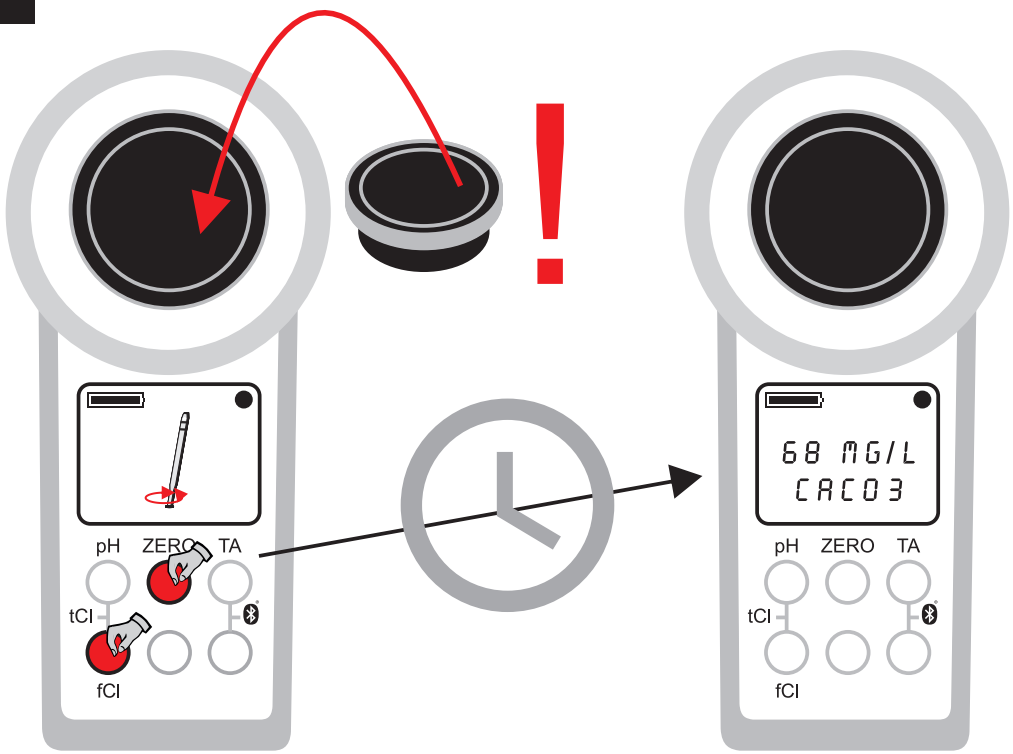


Calcium Hard. • Dureté Calcique • Dureza de Calcio • Kalziumhärte • Durezza del Calcio

6



7



Hardness Conversion • Conversion de dureté • Conversión de dureza • Härte-Umrechnung • Conversione di durezza

	$CaCO_3$ mg/l	°dH* (KH)	°e* (CH)	°f* (DC)
1 mg/l $CaCO_3$	1	0.056	0.07	0.1
1 mmol/l $K_{S\ 4,3}$	50	2.8	3.5	5.0

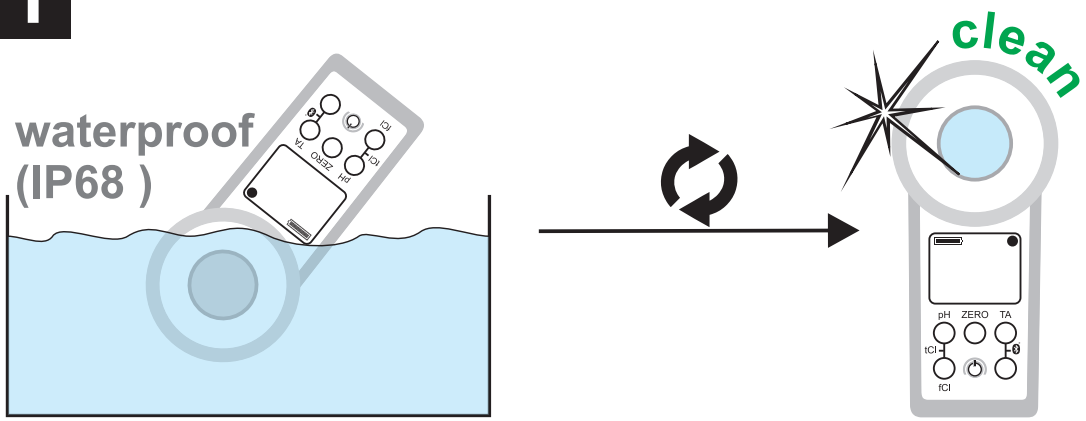
Urea
Urée
Harnstoff

0.1 - 2.5 mg/l (ppm)

*PL Urea 1**
*PL Urea 2**
*Ammonia N°1**
*Ammonia N° 2**

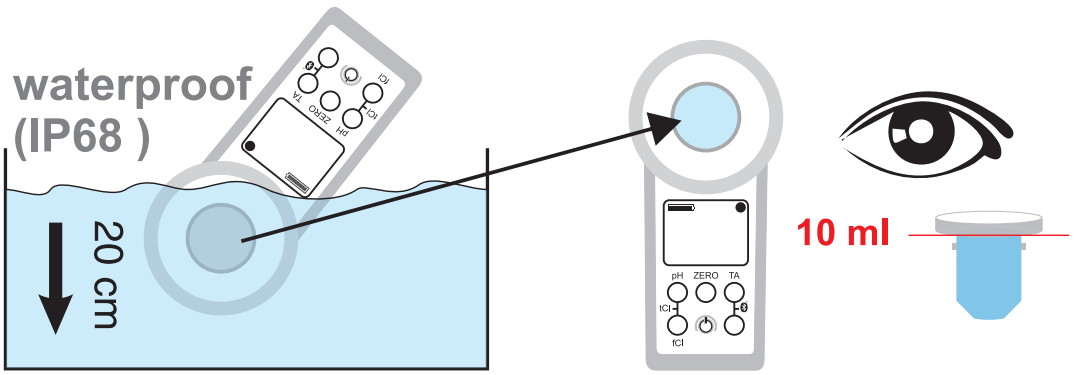
1

**not part of standard equipment*



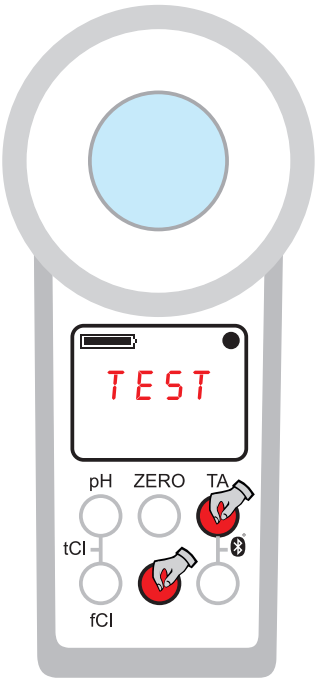
2

take 10 ml water sample



Urea • Urée • Harnstoff

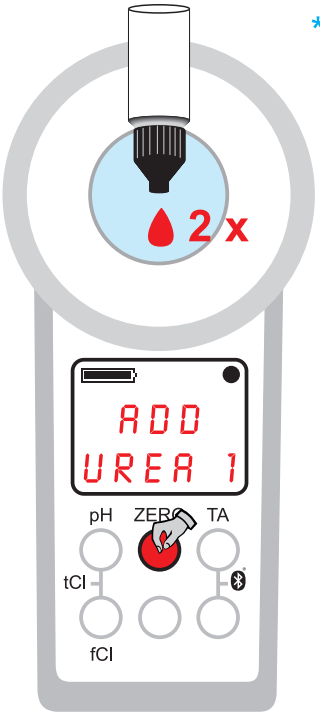
3



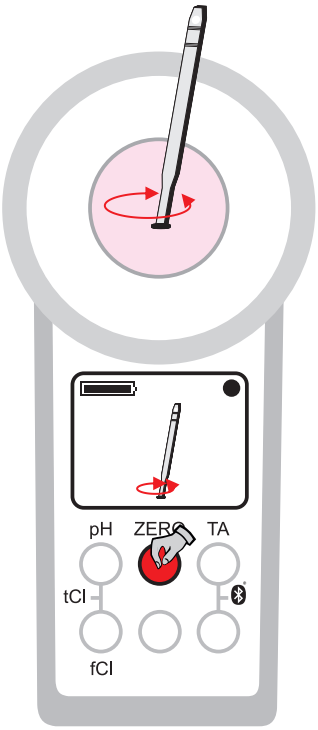
4

PL Urea 1*

*shake before use!



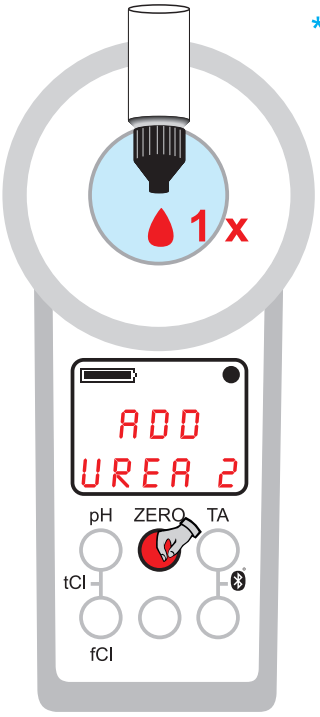
5



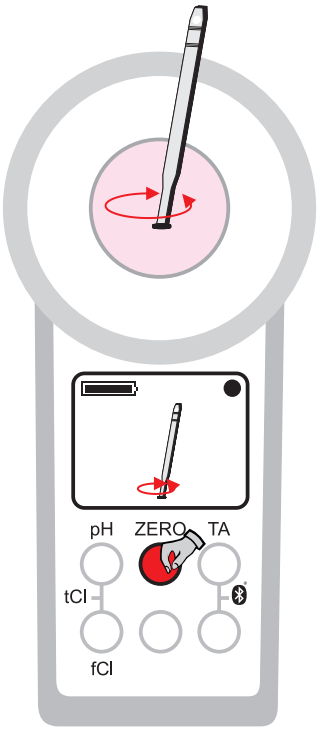
6

PL Urea 2*

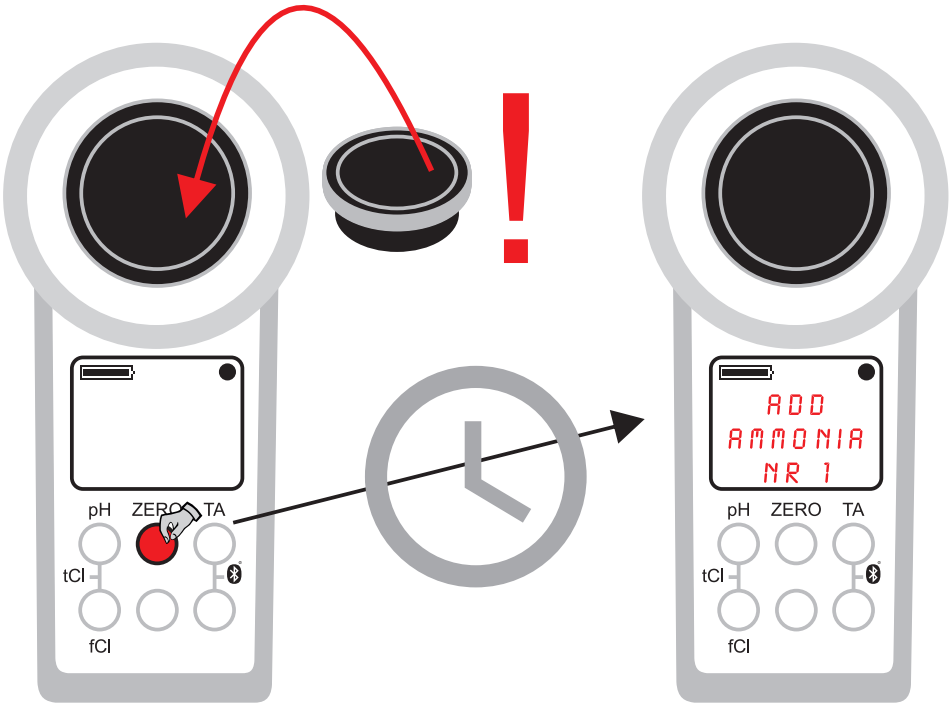
*shake before use!



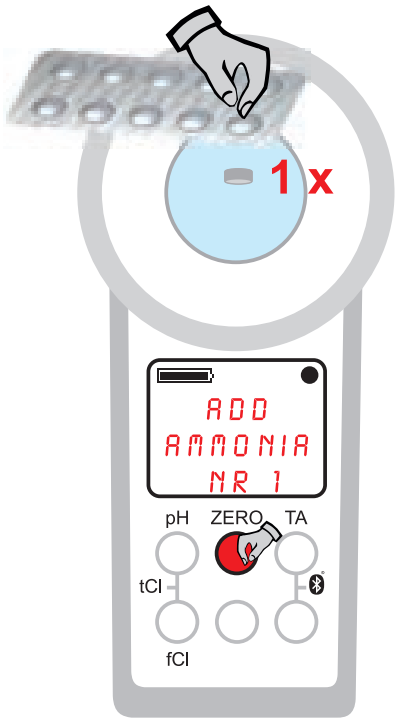
7



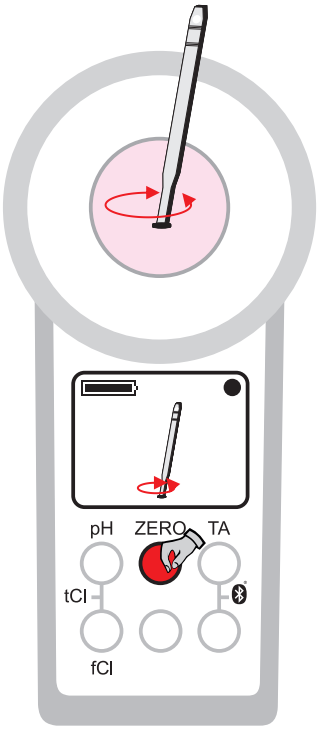
8



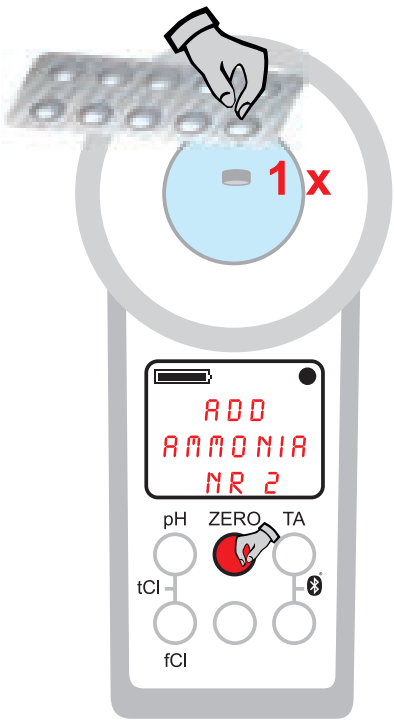
9 Ammonia N° 1



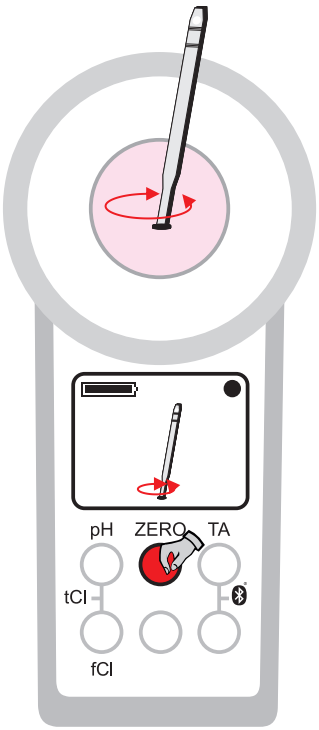
10



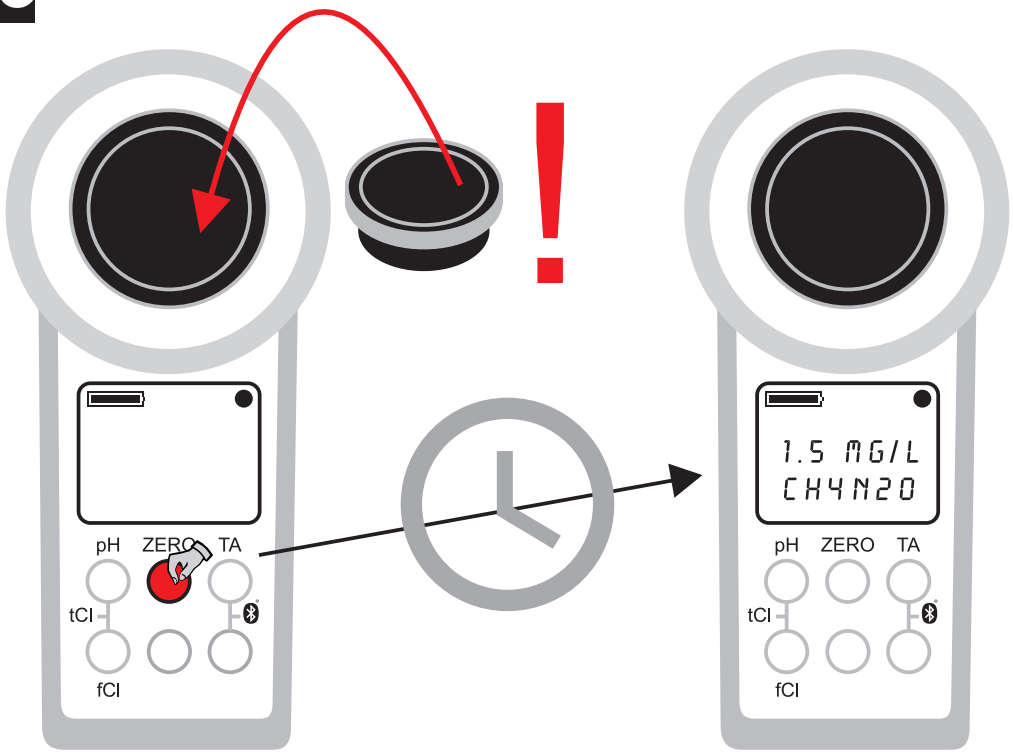
11 Ammonia N° 2



12



13



Ammonia N° 1 tablet only dissolves entirely after Ammonia N° 2 tablet was added. Ammonia and chloramines will be detected together. The result displayed will show the sum of both. Temperature of the sample needs to be between 20°C and 30°C. Test needs to be carried out not later than 1 hour after taking the sample. If sea water is tested, sample needs to be pre-treated with special conditioning powder before Ammonia N° 1 Photometer tablet is added. Do not store PL Urea 1 below 10°C as it might granulate.PL Urea 2 needs to be stored between 4°C and 8°C.

Le comprimé Ammonia N° 1 se dissout complètement une fois y avoir ajouté le comprimé Ammonia N°2. Ammoniaque et chloramines sont détectés ensemble. Le résultat affiché est donc la somme des deux.
L´échantillon doit avoir une température comprise entre 20°C et 30°C. Le test doit être réalisé au plus tard une heure après le prélèvement de l´échantillon. Si vous testez de l´eau de mer, il faut préalablement traiter l´échantillon avec des poudres à conditionnement spécielles avant d´y ajouter le comprimé Ammonia N°1. Ne stockez pas PL Urea 1 à une température inférieure à 10°C car cela pourrait entraîner une granulation. PL Urea 2 doit être stocké entre 4°C et 8°C.

Urea • Urée • Harnstoff

La tableta Ammonia N°1 no se disuelve por completo hasta que agregue la tableta Ammonia Nº 2. El amoníaco y cloraminas se detectan juntos. Por consiguiente, el resultado mostrado es la suma de los dos.
La temperatura de la muestra debe estar entre 20°C y 30°C. El análisis debe ser realizado dentro de una hora después de tomar la muestra. Para analizar agua de mar, la muestra debe ser pretratada con polvo de acondicionamiento especial antes de añadir la tableta Ammonia N°1. Tienda PL Urea 1 no menos de 10°C. Puede ser granulada. PL Urea 2 se debe guardar entre 4°C y 8°C.

Die Ammonia N°1 Tablette löst sich erst ganz auf, nachdem Sie die Ammonia N°2 Tablette zugeben. Ammoniak und Chloramine werden zusammen detektiert. Das angezeigte Ergebnis ist daher die Summe der beiden.
Die Temperatur der Probe muss zwischen 20°C und 30°C liegen. Der Test muss spätestens eine Stunde nach der Entnahme der Probe durchgeführt werden. Wenn Sie Meerwasser testen, muss die Probe mit einem speziellen Konditionierungspulver vorbehandelt werden, bevor Sie die Ammonia N°1 Tablette hinzufügen. Lagern Sie PL Urea 1 nicht unter 10°C. Es könnte granulieren. PL Urea 2 muss zwischen 4°C und 8°C gelagert werden.

La compressa di ammoniaca n ° 1 si dissolve completamente solo dopo aver aggiunto la compressa di ammoniaca n ° 2. L'ammoniaca e le clorammine vengono rilevate insieme. Il risultato visualizzato è quindi la somma dei due.
La temperatura del campione deve essere compresa tra 20 ° C e 30 ° C. Il test deve essere eseguito entro un'ora dopo aver prelevato il campione. Se si sta testando l'acqua di mare, il campione deve essere pretrattato con una polvere condizionante speciale prima di aggiungere la compressa di ammoniaca n ° 1. Non conservare l'urea PL 1 al di sotto di 10 ° C. Potrebbe granulare. PL Urea 2 deve essere conservato tra 4 ° C e 8 ° C.

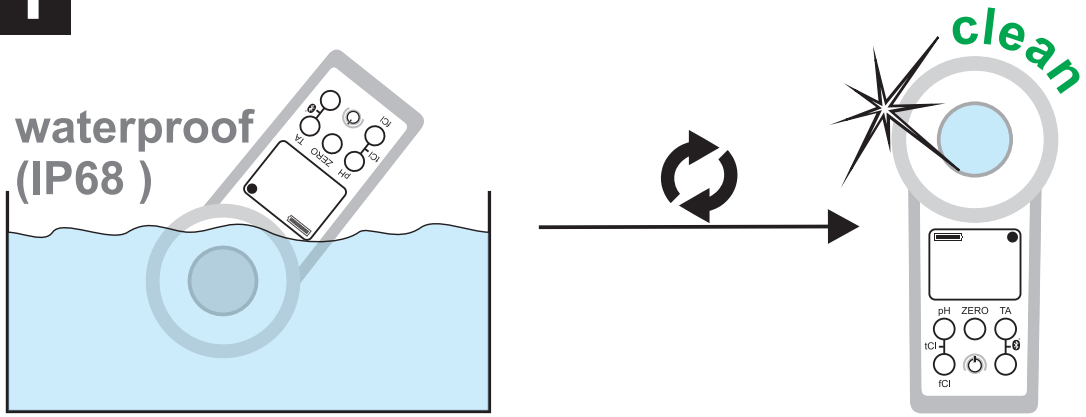
PHMB

5 - 60 mg/l (ppm)

PHMB Photometer

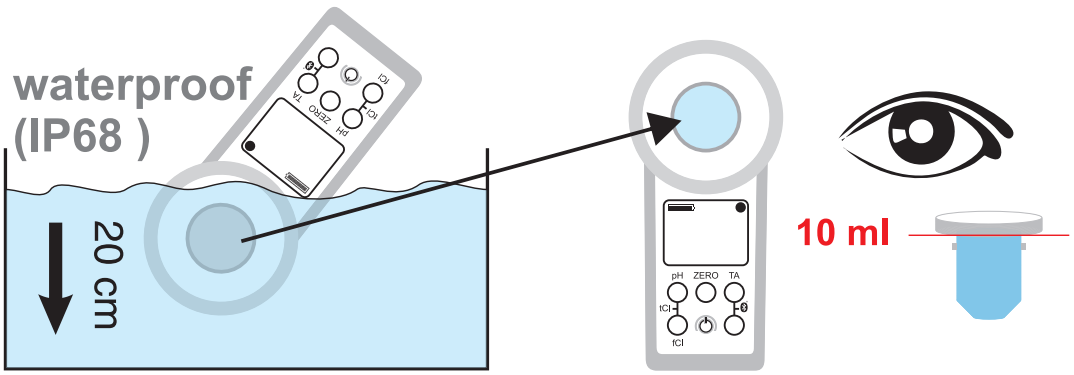
1

*not part of standard equipment



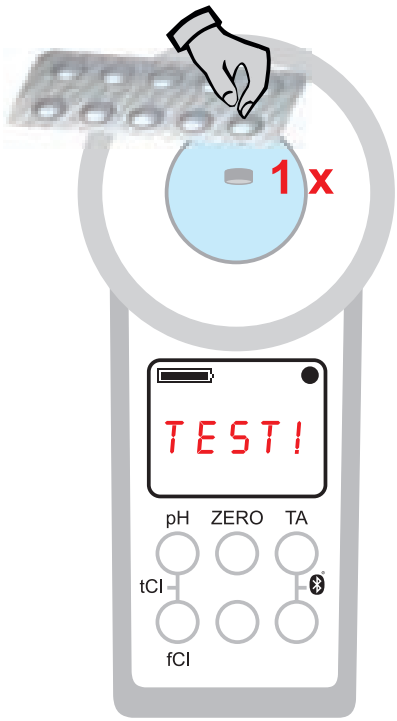
2

take 10 ml water sample

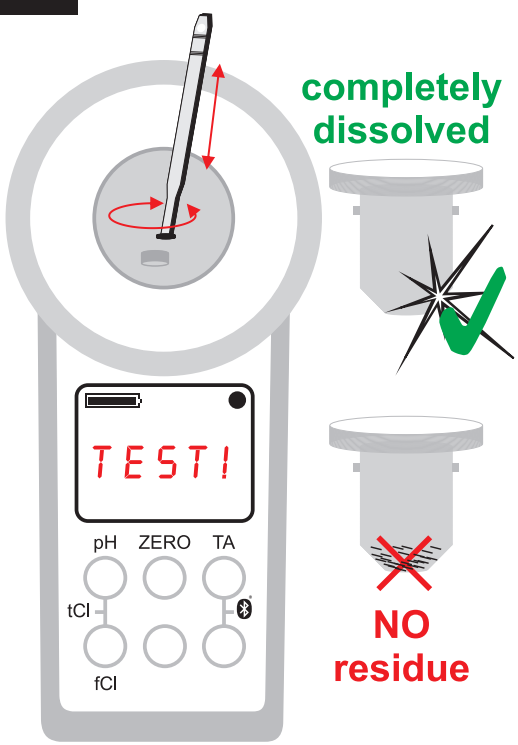


3

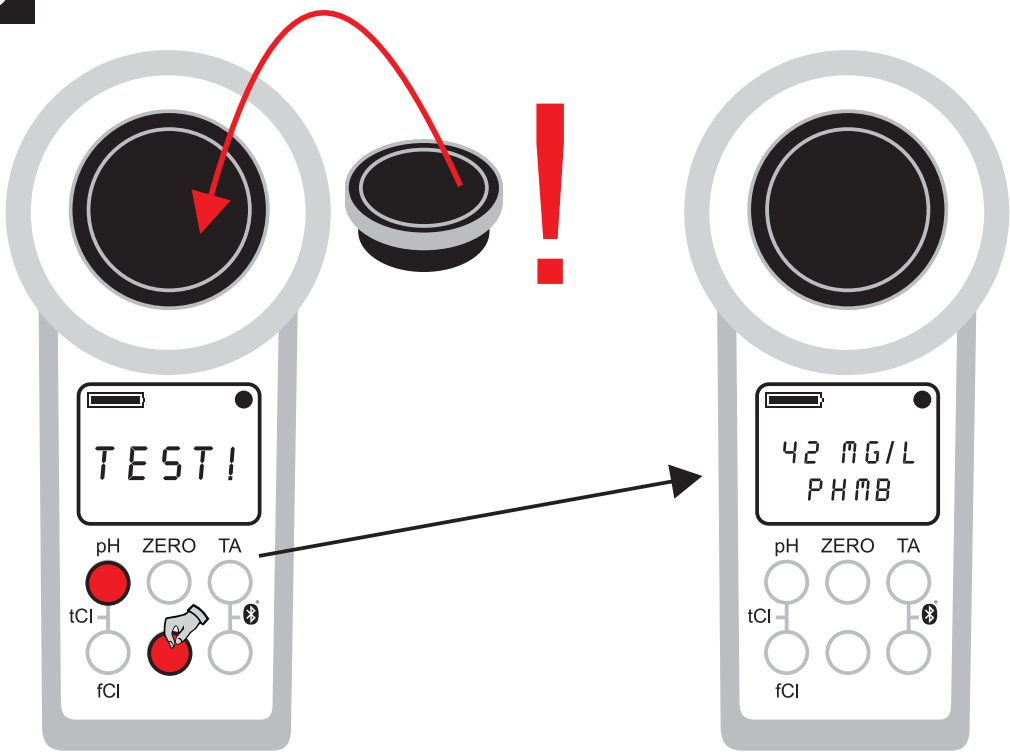
PHMB
Photometer



4



5



It is imperative that you clean the objects used for the measurement and come into contact with the sample water containing the reagent (cuvette, lid, stirring rod) thoroughly with a brush, water and then with distilled water, otherwise the measuring equipment may turn blue over time. Alkalinity values (M) <> 120 mg / l and calcium hardness values <> 200 mg / l can lead to measured value deviations.

Il est impératif de nettoyer soigneusement tous les objets utilisés pour la mesure qui rentre en contact avec l'échantillon d'eau contenant le réactif (cuve, couvercle, tige d'agitation) avec le goupillon, de l'eau puis de l'eau distillée, sinon l'équipement de mesure peut virer au bleu . Les valeurs d'alcalinité (M) <> 120 mg / l et les valeurs de dureté calcique <> 200 mg / l peuvent entraîner des écarts de valeur mesurés.

Es imprescindible que limpie a fondo con un cepillo los objetos utilizados para la medición y que hayan entrado en contacto con el agua de muestra que contiene el reactivo (cubeta, tapa, varilla de agitación). Use agua y después agua destilada, de lo contrario el equipo de medición puede volverse azul con el tiempo. Los valores de alcalinidad (M) <> 120 mg / l y los valores de dureza de calcio <> 200 mg / l pueden conducir a desviaciones de los valores medidos.

Reinigen Sie unbedingt die für die Messung verwendeten und mit dem mit Reagenz versetzten Messwasser in Berührung gekommenen Gegenstände (Küvette, Deckel, Rührstab) gründlich mit einer Bürste, Wasser und anschließend mit destilliertem Wasser, da sich ansonsten das Messbesteck mit der Zeit blau verfärben kann. Alkalinitätswerte (M) <>120 mg/l und Calzium-Härte-Werte <>200 mg/l können zu Messwertabweichungen führen.

È indispensabile pulire gli oggetti utilizzati per la misurazione e venire a contatto con l'acqua del campione contenente il reagente (cuvetta, coperchio, asta di agitazione) accuratamente con una spazzola, acqua e quindi con acqua distillata, altrimenti l'apparecchiatura di misurazione potrebbe diventare blu nel tempo. Valori di alcalinità (M) <> 120 mg / le valori di durezza del calcio <> 200 mg / l possono portare a deviazioni del valore misurato.

OR-UR / Dilution • OR-UR / Verdünnung
OR-UR / Dilución • OR-UR / Diluzione

OR = Overrange / UR = underrange. Test result is outside the range of the method. OR results can be brought into measurement range by dilution. Use syringe to take only 5ml (or 1ml) sample water plus 5ml (9ml) distilled water. Test again and multiply results times 2 (times 10). Dilution does not work with „pH“ measurement.

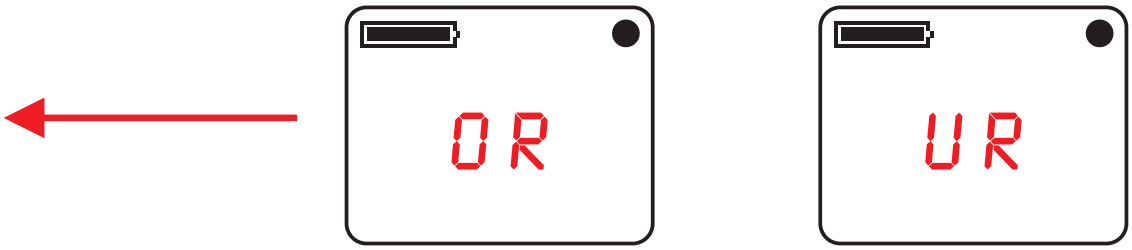
OR = Overrange (au dessus de la plage de mesure) / UR = underrange (en dessous de la plage de mesure). Le résultat du test est en dehors de la portée de la méthode. Si Affichage "OR" il faut diluer l'échantillon . Utilisez une seringue en plastique pour prendre 5 ml (ou 1 ml) d'eau échantillon et complétez j'usqu'à 10 ml avec de l'eau distillée. Testez à nouveau et multipliez le résultat par 2 (si vous avez pris 5 ml d'échantillon + 5 ml d'eau distillée) ou par 10 (si vous avez pris 1 ml d'échantillon et 9 ml d'eau distillée). La dilution ne fonctionne pas avec la mesure du "pH".

OR = Overrange / UR = Underrange
El resultado de la prueba está fuera del rango de este método. Los resultados "OR" pueden ser reducidos por dilución al rango de medición. Usar la jeringuilla y tomar 5 ml (o 1 ml) de agua de ensayo más 5 ml (9 ml) de agua destilada. Efectuar la medición y multiplicar el resultado por 2 (por 10). La dilución no es aplicable al parámetro "pH".

OR = Overrange / UR = Underrange
Das Testergebnis ist außerhalb des Messbereiches dieses Verfahrens. OR Ergebnisse können durch Verdünnung in den Messbereich gebracht werden. Verwenden Sie die Spritze und nehmen 5ml (oder 1ml) Testwasser plus 5ml (9ml) destilliertes Wasser. Führen Sie den Test durch und multiplizieren Sie das Ergebnis mal 2 (mal 10). Verdünnung ist nicht auf den Parameter "pH" anwendbar.

OR = Overrange / UR = Underrange
Il risultato del test è fuori del campo di misura di questo processo. Risultati "OR" possono essere essere portati nel campo di misura mediante diluizione. Utilizzare la siringa e prendere 5ml (o 1 ml) acqua di prova più 5ml (9 ml) di acqua distillata. Eseguire il test e moltiplicare il risultato per 2 (per 10). La diluizione non è applicabile al parametro "pH".

Error codes • Codes d'erreur • Códigos de error • Fehlercodes • codici di errore



BAT!: Change batteries • Changer les piles • Cambiar las pilas • Batterien wechseln • Cambiare le batterie

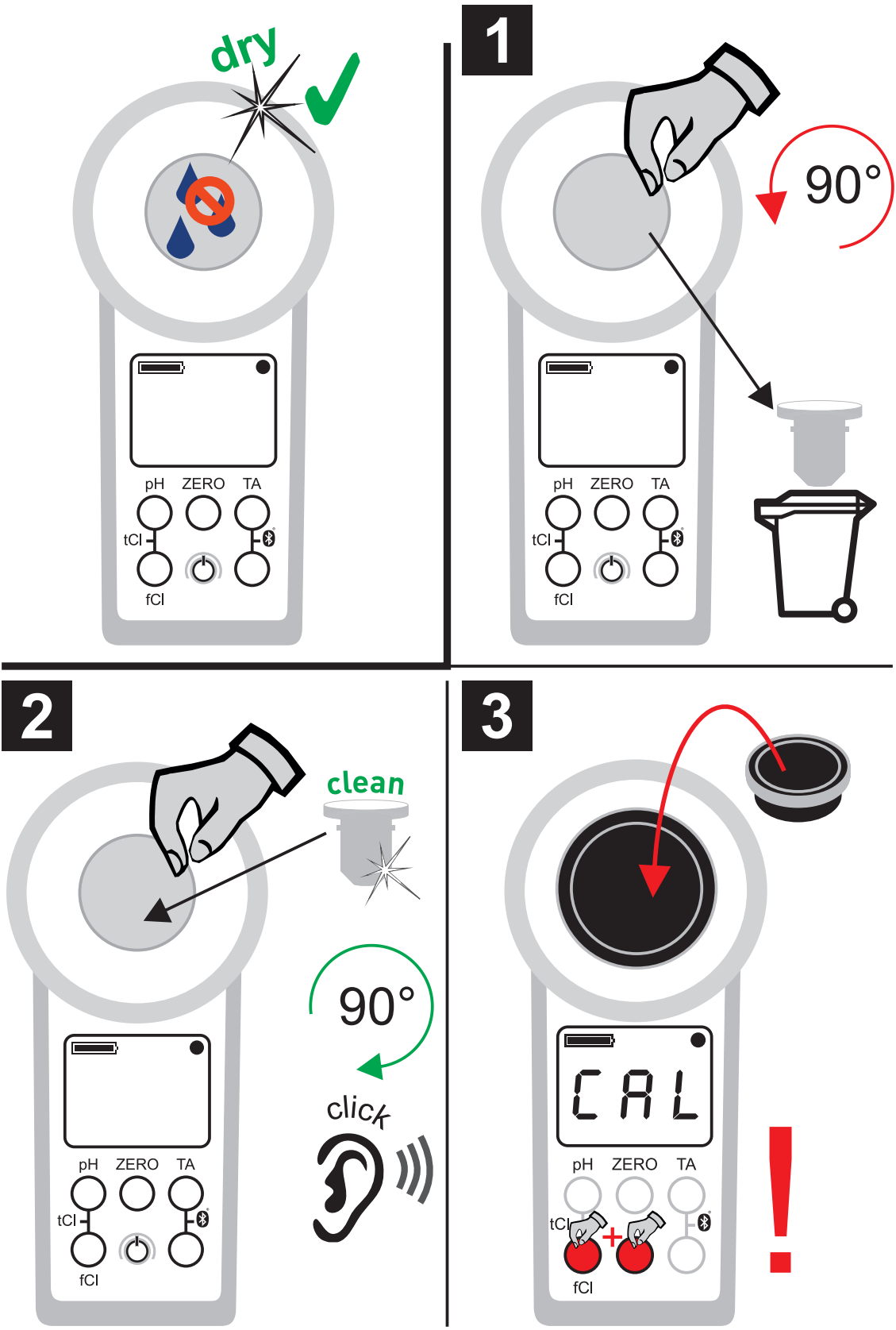
Err02: (too dark) Clean measurement chamber or dilute sample • (Trop sombre) Nettoyer la chambre de mesure ou diluer l'échantillon • (Demasiado oscura) Limpie la cámara de medición o diluya la muestra • (zu dunkel) Messkammer säubern oder Wasserprobe verdünnen • (Troppo scuro) Pulire camera misura o diluire il campione

Err03: (too bright) Don‘t forget light shield during measurement • (Trop lumineux) N'oubliez pas le couvercle durant la mesure • (Demasiado brillante) No olvide el protector de luz durante la medición • (zu hell) Lichtschutzdeckel während der Messung nicht vergessen • (Troppo chiaro) Non dimenticare scudo luce durante la misurazione

Err04: Repeat ZERO and TEST • Répéter ZERO et TEST • Repite ZERO y TEST • ZERO und TEST wiederholen • Ripetere ZERO e TEST

Err05: Ambient temperature below -5°C or above 60°C • température ambiante sous -5°C ou supérieure à 60°C • La temperatura ambiente inferior a -5°C o superior a 60°C • Umgebungstemperatur unter -5°C oder über 60°C • Temperatura ambiente inferiore a -5°C o superiori a 60°C

Changing the cuvette • Changer la cuvette Cambiar la cubeta • Küvettenwechsel cambiando la cuvetta



Accessories • Accessoires • Accesorios Zubehör • Accessori

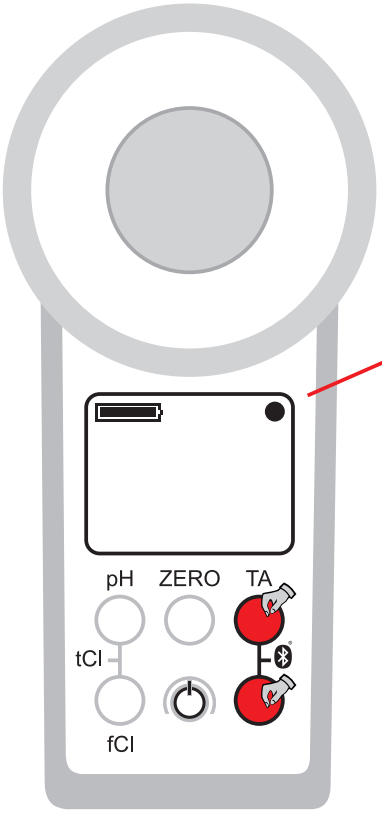
Reagents • Reagentia • Reagenser • Reaktifler • Реагенты

POL01-Nf	20/20/10/10/10 Phenol Red / DPD N° 1 / DPD N° 3 / -Test / Alkalinity-M Photometer
TbsPph50	50 x Phenol Red Photometer
TbsPD150	50 x DPD N° 1 Photometer
TbsPD350	50 x DPD N° 3 Photometer
TbsPD450	50 x DPD N° 4 Photometer
TbsPCAT50	50 x -Test Photometer
TbsPHP50	50 x Hyd. Peroxide LR Phot.
TbsPHPHR50	50 x Hyd. Peroxide HR Phot.
TbsHAPP50	50 x Acidifying PT Photometer
TbsPTA50	50 x Alkalinity-M Photometer
TbsHGC50	50 x Glycine
TbsHAM150	50 x Ammonia N° 1 Photometer
TbsPAM250	50 x Ammonia N° 2 Photometer
POL20TH1	20ml POLTH1 (50 tests)
POL10TH2	10ml POLTH2 (50 tests)
POL20CaH1	20ml POLCaH1 (50 tests)
POL20CaH2	20ml POLCaH2 (50 tests)
POL4Urea1	4ml PL Urea 1
POL2Urea2	2ml PL Urea 2

Spare parts • Pièces de rechange • Piezas de repuesto • Ersatzteile • Pezzi di ricambio

POLsp-kv	Replacement cuvette
POLsp-str	Plastic stirring/crushing rod
POLsp-ls	Rubber light shield
POLsp-box	PoolLab carrying box
POLsp-RSK-f	Reference standard-kit

Software / App • Logiciels / App
Software / Aplicación



● Bluetooth ON
○ Bluetooth OFF

Windows/ MacOS: **www.poollab.org**

GET IT ON Google Play

Download on the App Store

Connect the PoolLab with the LabCom app or software before the first use, after each battery change and after every update to set the date and time automatically.

Connectez le PoolLab à l'application ou au logiciel LabCom avant la première utilisation, après chaque changement de pile et après chaque mise à jour pour régler automatiquement la date et l'heure.

Conecte el PoolLab a la aplicación o software LabCom antes del primer uso, después de cada cambio de pilas y después de cada actualización, para configurar la fecha y la hora automáticamente.

Verbinden Sie den PoolLab vor der ersten Benutzung, nach jedem Batteriewechsel und nach jedem Update mit der LabCom App oder Software, um Datum und Uhrzeit automatisch zu setzen.

Collega PoolLab con l'app o il software LabCom prima del primo utilizzo, dopo ogni sostituzione della batteria e dopo ogni aggiornamento, per impostare automaticamente la data e l'ora.

Technical data • Données techniques
Datos técnicos • Technische Daten
Dati tecnici

FAQ ▶ www.poollab.org

MSDS ▶ msds.water-id.com

Cloud ▶ labcom.cloud

LED:	530 nm / 570 nm / 620 nm
	3 x AAA (1.5 V, LR03)
	300 sec.
	5 - 45°C
	IP 68 (1 h / 1.2 m)

Developed in Germany
Produced in PRC

Tolerances • Tolérances
Tolerancias • Toleranzen • Tolleranze

Active Oxygen (MPS) • Oxygène actif (MPS)
Oxígeno activo (MPS) • Aktivsauerstoff (MPS)
Ossigeno Attivo (MPS)

Range	±
0.0 - 5.0	0.5 mg/l
5.0 - 15.0	1.3 mg/l
15.0 - 25.0	3.8 mg/l
25.0 - 30.0	5.0 mg/l

Alkalinity • Alcalinité • Alcalinidad
Alkalinität • Alcalinità

Range	±
0 - 30	3 mg/l
30 - 60	7 mg/l
60 - 100	12 mg/l
100 - 200	18 mg/l

Bromine • Brome • Bromo • Brom • Bromo

Range	±
0.0 - 2.5	0.2 mg/l
2.5 - 6.5	0.6 mg/l
6.5 - 11.0	1.7 mg/l
11.0 - 13.5	2.3 mg/l

Tolerances • Tolérances
Tolerancias • Toleranzen • Tolleranze

Calcium Hardness • Dureté Calcique
Dureza de Calcio • Kalziumhärte
Durezza del Calcio

Range	±
0 - 25	8 mg/l
25 - 100	22 mg/l
100 - 300	34 mg/l
300 - 500	45 mg/l

Chlorine • Chlore • Cloro • Chlor • Cloro

Range	±
0.00 - 2.00	0.10 mg/l
2.00 - 3.00	0.23 mg/l
3.00 - 4.00	0.75 mg/l
4.00 - 8.00	1.00 mg/l

Cyanuric Acid • Acide nurique
Ácido cianúrico • Cyanursäure
Acido Cianurico

Range	±
0 - 15	1 mg/l
15 - 50	5 mg/l
50 - 120	13 mg/l
120 - 160	19 mg/l

Tolerances • Tolérances
Tolerancias • Toleranzen • Tolleranze

Chlorine Dioxide • Dioxyde de Chlore
Dióxido de cloro • Chlordioxid
Biossido di Cloro

Range	±
0.00 - 2.00	0.19 mg/l
2.00 - 6.00	0.48 mg/l
6.00 - 10.00	1.43 mg/l
10.00 - 11.40	1.90 mg/l

Hydrogen Peroxide • Peroxyde d'Hydrogène
Peróxido de Hidrógeno • Wasserstoffperoxid
Perossido di Idrogeno - (LR)

Range	±
0.00 - 0.50	0.05 mg/l
0.50 - 1.50	0.12 mg/l
1.50 - 2.00	0.36 mg/l
2.00 - 2.90	0.48 mg/l

Hydrogen Peroxide • Peroxyde d'Hydrogène
Peróxido de Hidrógeno • Wasserstoffperoxid
Perossido di Idrogeno - (HR)

Range	±
0 - 50	5 mg/l
50 - 110	6 mg/l
110 - 170	11 mg/l
170 - 200	13 mg/l

Tolerances • Tolérances
Tolerancias • Toleranzen • Tolleranze

Ozone • Ozono • Ozon

Range	±
0.00 - 1.00	0.07 mg/l
1.00 - 2.00	0.17 mg/l
2.00 - 3.00	0.51 mg/l
3.00 - 4.00	0.68 mg/l

pH

Range	±
6.50 - 8.40	0.11 mg/l

PHMB

Range	±
5 - 60	5 mg/l

Total Hardness • Dureté Totale • Dureza Total Gesamthärte • Durezza Totale

Range	±
0 - 30	3 mg/l
30 - 60	5 mg/l
60 - 100	10 mg/l
100 - 200	17 mg/l
200 - 300	22 mg/l
300 - 500	58 mg/l

Tolerances • Tolérances
Tolerancias • Toleranzen • Tolleranze

Urea • Urée • Harnstoff

Range	±
0.00 - 0.30	0.05 mg/l
0.30 - 0.60	0.06 mg/l
0.60 - 1.00	0.09 mg/l
1.00 - 1.50	0.12 mg/l
1.50 - 2.50	0.19 mg/l

Disposal

Device

According to EC Directive 2002/96/EC, electronic devices must not be disposed of in normal domestic waste. The manufacturer of this device, Water-i.d. GmbH, Daimlerstr. 20, D-76344 Eggenstein will dispose of your PoolLab Photometer free of charge (not including costs of sending the device to us). Send your PoolLab for disposal -freight prepaid- to the address shown above.

Batteries

According to EC Guideline 2006/66/EC, user is obliged to dispose in a proper manner by returning worn out batteries to dedicated collection places such as any shop selling batteries. Batteries must not be disposed of in normal domestic waste.

CE compliance statement

We, the manufacturer of the PoolLab 1.0 Photometer hereby declare compliance of PoolLab 1.0 Photometer with the essential requirements in accordance to the Directive 2014/53/EU of the European Parliament and of the Council of April 16th, 2014:

ETSI EN 300 328 (V2.1.1)
EN 62479 (2010)
ETSI EN 301 489-1 (V2.1.1)
ETSI EN 301 489-17 (3.1.1)
EN 61326 (2013)
EN 61010-1 (2010)

FCC Part 15 compliance statement
IC licence-exempt RSS compliance statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Industry Canada Licence-Exempt Radio Apparatus

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus
This device complies with FCC and Industry Canada RF radiation exposure limits set forth for general population (uncontrolled exposure). This device must not be collocated or operating in conjunction with any other antenna or transmitter.
Cet appareil est conforme aux limites FCC et Industry Canada concernant l'exposition aux rayonnements RF établies pour le grand public. (Environnement non-contrôlé)
Cet émetteur ne doit pas être co-situé ou fonctionner conjointement avec une autre antenne ou un autre émetteur.

Changes or modifications not expressly approved by Water-i.d. GmbH could void the user‘s authority to operate the equipment.

FCC ID:	2ALRR-POOLLAB10
IC:	22610- POOLLAB10
Model:	POOL LAB 1.0

NOTES • NOTAS • NOTIZEN • NOTE

CERTIFICATE OF COMPLIANCE

We hereby certify that the device

PoolLab 1.0

With it‘s serial number as stated below,
has passed intensive visual and technical
checks as part of our QM documentation.
We confirm the device got factory-calibrated.

Water-i.d. GmbH (Germany)

Andreas Hock, Managing Director
Water-i.d. GmbH • Daimlerstr. 20 • D-76344 Eggenstein • Germany

Water-i.d. is certified according to ISO 9001:2015

S/N
Manufacturing date