

PoolLAB[®] 1.0

PHOTOMETER



USER MANUAL



GEBRAUCHSANLEITUNG



MANUAL DE USUARIO



MANUEL D'UTILISATION




MANUALE DELL'UTENTE

**NEW: Quick Start
Guide included!**



NEU: Inklusive Schnellstartanleitung! (S.14) | NUEVO:
¡Guía de inicio rápido incluida! (p.14) | NOUVEAU:
Guide de démarrage rapide inclus ! (p.14) | NUOVO: Guida
rapida inclusa! (p.14)

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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 CYA-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!



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



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!



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!



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

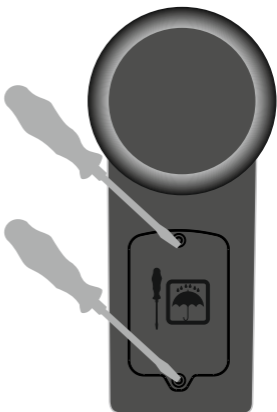
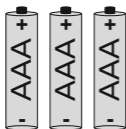


Change | Wechseln | Cambio
Changer | Cambiamento

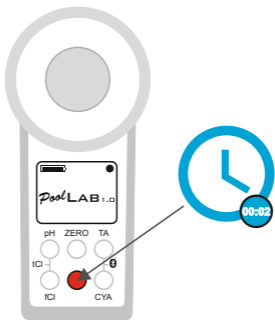
No rechargeable batteries! | Keine aufladbaren Batterien!
¡No hay baterías recargables! | Pas de piles rechargeables!
Niente batterie ricaricabili!



3 x AAA



Switch On | Einschalten | Encender
Allumer | Accendere



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

Die On/Off Taste kann auch zum Abbrechen des Countdowns während der Messung verwendet werden (nicht empfohlen).

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

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

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



PHOTOMETER



RAPID



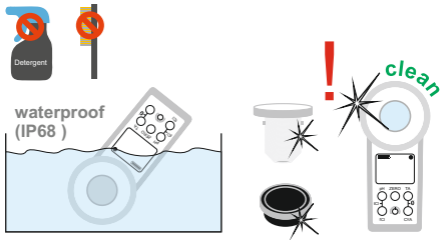
Always use PHOTOMETER grade tablets! Never use RAPID grade tablets! Do not touch reagent tablets!

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

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

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

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



It is important to clean the device after each measurement to get rid of any reagent residues! Please ensure that the cuvette has been cleaned before each measurement (e.g. under clear water/or simply rinsing the cuvette in the pool is sufficient as long as no residues remain).

Il est important de nettoyer le dispositif après chaque mesure pour éliminer les résidus de réactifs! Veuillez vous assurer que la cuvette a été nettoyée avant chaque mesure (par ex. sous l'eau claire/ou un simple rinçage de la cuvette dans la piscine suffit, tant qu'il n'y a pas de résidus).

Es importante limpiar el dispositivo después de cada medición para deshacerse de cualquier residuo de reactivo! Por favor, asegúrese de que la cubeta se ha limpiado antes de cada medición (por ejemplo, bajo agua limpia o simplemente enjuagando la cubeta en la piscina es suficiente mientras no queden residuos).

Es ist wichtig, das Gerät nach jeder Messung zu reinigen, um sämtliche Reagenzienrückstände zu entfernen! Bitte stellen Sie sicher, dass die Küvette vor jeder Messung gereinigt wurde (z.B. unter klarem Wasser/oder einfaches Abspülen der Küvette im Pool reicht aus, solange keine Rückstände zurückbleiben).



È importante pulire il dispositivo dopo ogni misurazione per eliminare i residui di reagente! Assicurarsi che la cuvetta sia stata pulita prima di ogni misurazione (ad esempio sotto l'acqua chiara o semplicemente sciacquando la cuvetta nella piscina è sufficiente, purché non rimangano residui).



Do not leave the device in the sun!

Lassen Sie das Gerät nicht in der Sonne liegen!

¡No deje el dispositivo al sol!

Ne laissez pas l'appareil au soleil!

Non lasciare il dispositivo al sole!



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

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

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

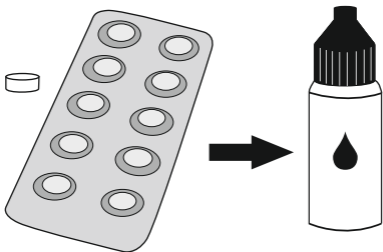
Le PoolLab® convient également aux piscines d'eau salée/piscines d'électrolyse au sel!

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

NEW!

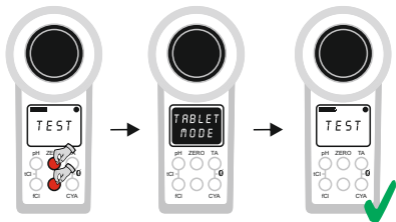
Tablet Mode → Liquid Mode
Tabletten Modus → Flüssigreagenz Modus
Modo Tableta → Modo Reactivo Líquido
Mode Comprimés → Mode Réactif Liquide
Modalità Compressa → Modalità Reagente Liquido

pH | fCl₂ | tCl₂ | cCl₂ | Br₂ | ClO₂ | O₃

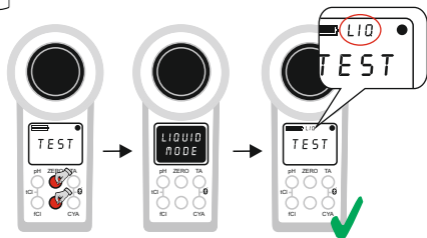




Tablet Mode: Press And Hold ZERO + Power Button



Liquid Mode: Press And Hold ZERO + Power Button



From firmware version 72 onwards, you have the option of measuring the following parameters with tablets as well as with liquid reagents: **pH, chlorine, chlorine dioxide, ozone and bromine**. You can choose between two measurement settings in the unit: Tablets and liquid reagents. To ensure that the correct measurement result is displayed, check the current mode by pressing and holding ZERO & Power button before the next measurement. The mode is saved when the device is switched off and is preset the next time it is switched on.

Ab Firmware-Version 72 haben Sie die Möglichkeit, sowohl mit Tabletten als auch mit Flüssigreagenzien folgende Parameter zu messen: **pH, Chlor, Chlordioxid, Ozon und Brom**. Sie können im Gerät zwischen zwei Messeinstellungen wählen: Tabletten und Flüssigreagenzien. Um sicherzustellen, dass das richtige Messergebnis angezeigt wird, überprüfen Sie den aktuellen Modus, indem Sie vor der nächsten Messung die ZERO- & Ein/Aus Taste gedrückt halten. Der Modus wird beim Ausschalten des Geräts gespeichert und ist beim nächsten Einschalten voreingestellt.

A partir de la versión 72 del firmware, tiene la opción de medir los siguientes parámetros con pastillas y con reactivos líquidos: **pH, cloro, dióxido de cloro, ozono y bromo**. Puede elegir entre dos configuraciones de medición en el aparato: Pastillas y reactivos líquidos. Para asegurarse de que se muestra el resultado correcto de la medición, compruebe el modo actual manteniendo pulsados los botones CERO y Encendido antes de la siguiente medición. El modo se guarda cuando se apaga el aparato y se preajusta la próxima vez que se enciende.

À partir de la version 72 du micrologiciel, vous avez la possibilité de mesurer les paramètres suivants avec des tablettes ainsi qu'avec des réactifs liquides: **pH, chlore, dioxyde de chlore, ozone et brome**. Vous pouvez choisir entre deux réglages de mesure dans l'appareil: Comprimés et réactifs liquides. Pour s'assurer que le résultat correct de la mesure s'affiche, vérifiez le mode actuel en appuyant sur les boutons ZERO et Power et en les maintenant enfoncés avant la prochaine mesure. Le mode est enregistré lorsque l'appareil est éteint et est pré-réglé lors de la prochaine mise en marche.

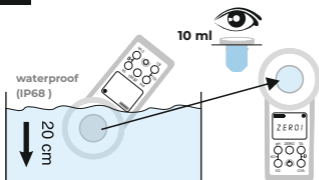
A partire dalla versione 72 del firmware, avete la possibilità di misurare i seguenti parametri sia con pastiglie che con reagenti liquidi: **pH, cloro, ossigeno attivo, biossido di cloro, ozono e bromo**. È possibile scegliere tra due impostazioni di misurazione nell'unità: Compresse e reagenti liquidi. Per assicurarsi che venga visualizzato il risultato corretto della misurazione, controllare la modalità corrente tenendo premuto il pulsante ZERO & Power prima della prossima misurazione. La modalità viene salvata quando l'apparecchio viene spento e viene preimpostata alla successiva accensione.

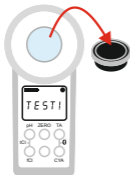


QUICK START GUIDE
Kurzanleitung
Guía De Inicio Rápido
Guide De Démarrage Rapide
Guida Rapida



**Scan the QR-code to
watch our intstruction video**

1**3 x AAA****2****Hold & Press To Switch On****3****START: Take 10 ml Water Sample****4****Put On Lightshield****5****ZERO****6**

7**Remove Lightshield****8**

Reagent(s)
For Your
Test (Refer
To Chapter
In Manual)

6**7****Put On Lightshield****8**

Shortcut
For Your
Test (Refer
To Chapter
In Manual)

**9**

Await
Countdown

**10**

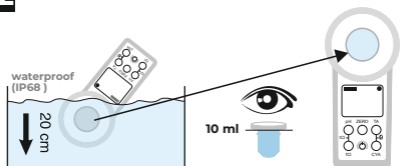
11

Empty & Clean



12

For Next Test: Take 10ml*



13

***If Device Was Not Switched Off, Start From Step 8**

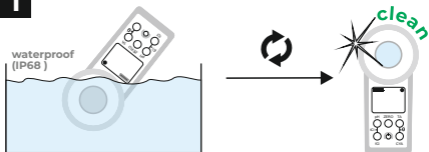


***If Device Was Switched Off, Start From Step 3**



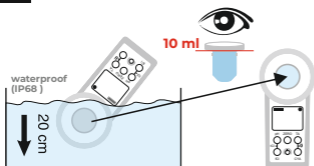
ZERO

1

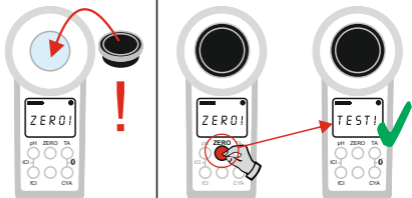


2

Take 10 ml Water Sample



3



! Only 1 Time Per Test Batch | Nur Ein Mal Pro Testreihe !
Sólo Una Vez Por Lote De Prueba | Une Seule Fois
Par Lot De Test | Solo Una Volta Per Test In Batch

The "ZERO" step (page 18) is only necessary once after switching on. Make sure that the water to be measured **does not (!)** contain any tablet/reagent in the cuvette and that the light protection cover is in place. If you do not repeat the "ZERO" before each subsequent measurement, please empty the cuvette after the last and before the next measurement and fill it freshly with the water to be measured.

Der „ZERO“-Schritt (Seite 18) ist nur 1 x nach dem Einschalten notwendig. Achten Sie darauf, dass beim „ZERO“ das zu messende Wasser in der Küvette **keine (!)** Tablette/Reagenz enthält und der Lichtschutzdeckel aufgesetzt ist. Sofern Sie den „ZERO“ nicht vor jeder Folgemessung wiederholen, bitte nach der letzten und vor der nächsten Messung die Küvette leeren und frisch mit dem zu messenden Wasser befüllen.

El paso "ZERO" (página 18) sólo es necesario una vez después de la conexión. Asegúrese de que el agua que se va a medir **no contiene ninguna (!)** tableta/reactivo en la cubeta y que la tapa de protección contra la luz está colocada. Si no repite el "ZERO" antes de cada medición posterior, vacíe la cubeta después de la última y antes de la siguiente medición y llénela de nuevo con el agua que va a medir.

L'étape "ZERO" (page 18) n'est nécessaire qu'une seule fois après la mise en marche. Lors du "ZERO", veillez à ce que l'eau à mesurer dans la cuvette **ne contienne pas (!)** de pastille/réactif et que le couvercle de protection contre la lumière soit en place. Si vous ne répétez pas le "ZERO" avant chaque mesure consécutive, veuillez vider la cuvette après la dernière mesure et avant la suivante et la remplir à nouveau avec l'eau à mesurer.

Il passo "ZERO" (pagina 18) è necessario solo una volta dopo l'accensione. Assicurarsi che l'acqua da misurare **non contenga alcuna (!)** compressa/reagente nella cuvetta e che il coperchio di protezione dalla luce sia al suo posto. Se non si ripete lo "ZERO" prima di ogni misurazione successiva, si prega di svuotare la cuvetta dopo l'ultima e prima della misurazione successiva e riempirla nuovamente con l'acqua da misurare.

Active Oxygen
Aktivsauerstoff
Oxígeno Activo
Oxygène Actif
Ossigeno Attivo
(MPS)

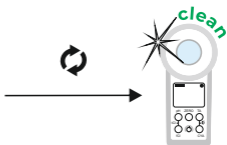
0.0 – 30.0 ppm (mg/l)

DPD N°4 Photometer*



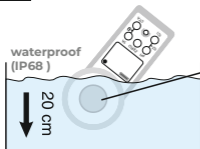
1

*not part of standard equipment



2

Take 10 ml Water Sample

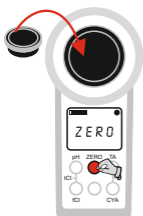


10 ml



3

ZERO! (p.18)



4

1 x DPD N°4
Photometer*



5

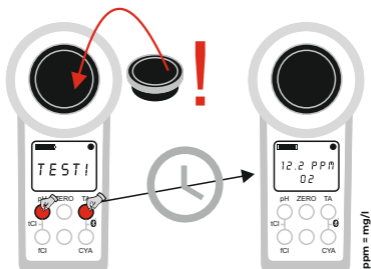


Completely
Dissolved



NO
Residue

6



Alkalinity
Alkalinität
Alcalinidad
Alcalinité
Alcalinità

0 – 200 ppm (mg/l) CaCO_3

Alkalinity-M Photometer

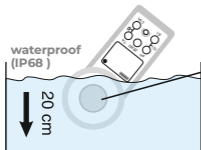


1



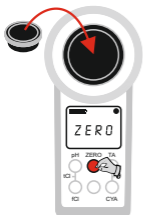
2

Take 10 ml Water Sample



3

ZERO! (p.18)



4

1 x Alkalinity-M
Photometer



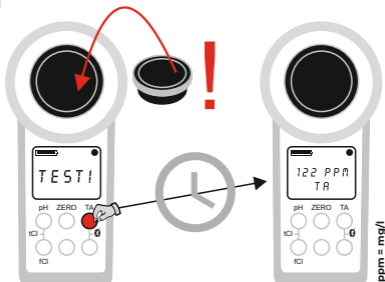
5



Completely
Dissolved



6



Bromine Brom Bromo Brome Bromo

0.0 – 13.5 ppm (mg/l)

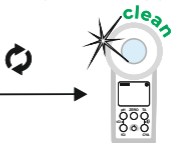
DPD N°1 Photometer (DPD 1A + 1B Liquid)
Glycine*



1

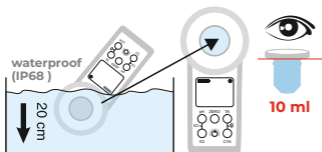


*not part of standard equipment



2

Take 10 ml Water Sample



3

ZERO!
(p.18)



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**".

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.

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**".

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**».

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**".

A

With Chlorine | Mit Chlor | Con Cloro
Avec Du Chlore | Con il Cloro

4A

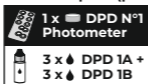
1 x Glycine*

**5A**

Completely dissolved

**6A**

Tablet Or Liquid? (p. 10)

**7A**

Completely dissolved

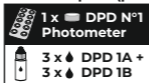


B

Without Chlorine | Ohne Chlor
Sin Cloro | Sans Chlore | Senza Cloro

4B

Tablet Or Liquid? (p. 10)



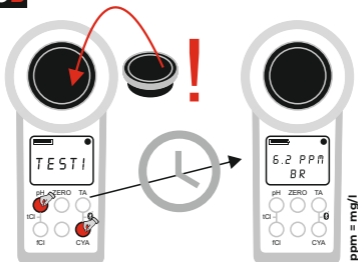
5B



Completely
Dissolved



8A/6B



Calcium Hardness
Kalziumhärte
Durezza De Calcio
Dureté Calcique
Durezza Del Calcio

0 – 500 ppm (mg/l)

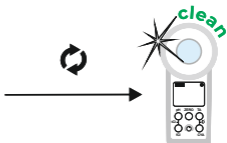
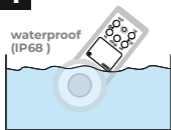
POL20CaH1*

POL20CaH2*



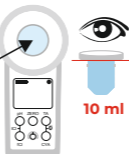
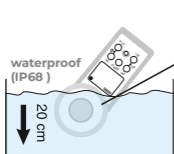
1

*not part of standard equipment



2

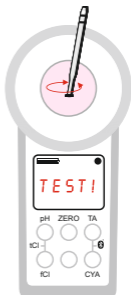
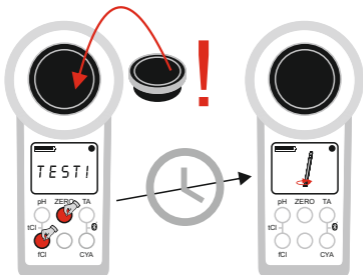
Take 10 ml Water Sample



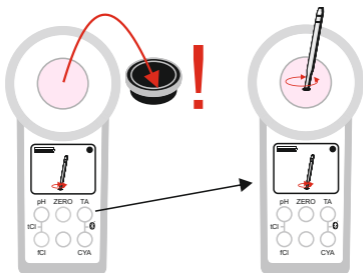
3

ZERO!
(p.18)

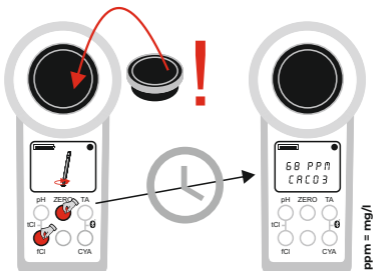


4**POL20CaH1***
POL20CaH2***Shake
Before
Use!***5****6**

7



8





	CaCO_3 mg/l	$\text{K}_{\text{S}4,3}$ mmol/l	$^\circ\text{dH}^*$ (KH)	$^\circ\text{e}^*$ (CH)	$^\circ\text{f}^*$ (DC)	mval
--	-------------------------	------------------------------------	-----------------------------	----------------------------	----------------------------	------

1 mg/l CaCO_3	1	0.01	0.056	0.07	0.1	0.02
1 mmol/l $\text{K}_{\text{S}4,3}$	100	1	5.6	7.0	10.0	2

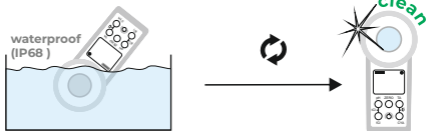
Chlorine
Chlor
Cloro
Chlore
Cloro

0.00 – 8.00 ppm (mg/l)

DPD N°1 Photometer (DPD 1A + 1B Liquid)
DPD N°3 Photometer (DPD 3C Liquid)

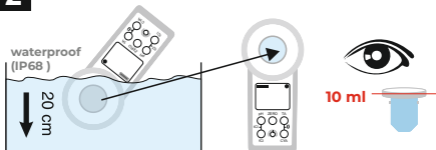
0.00 4.00 8.00 → OR

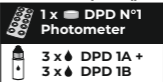
1

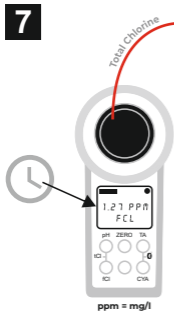
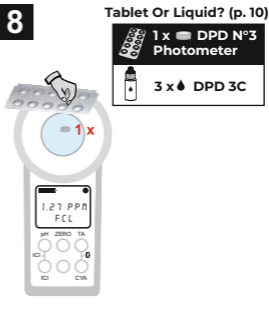
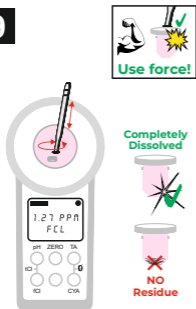


2

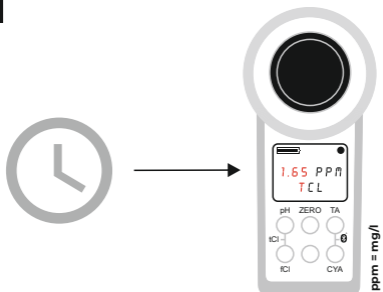
Take 10 ml Water Sample



3**ZERO! (p.18)****4****Tablet Or Liquid? (p. 10)****5****Completely Dissolved****6**

7**8****9****10**

11



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. **The free chlorine measurement must be taken within 1 minute after dissolving the tablet. After that, the measured values may increase continuously.**

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. **Die Messung des freien Chlors muss innerhalb von 1 Minute nach Auflösen der Tablette erfolgen. Danach können die Messwerte kontinuierlich steigen.**





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. **La medición del cloro libre debe realizarse en el plazo de 1 minuto tras la disolución de la pastilla. Después, los valores medidos pueden aumentar continuamente.**

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. **La mesure du chlore libre doit être effectuée dans la minute qui suit la dissolution du comprimé. Après cela, les valeurs mesurées peuvent augmenter de façon continue.**

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. **La misurazione del cloro libero deve essere effettuata entro 1 minuto dopo aver sciolto la compressa. Dopo di che i valori misurati possono aumentare continuamente.**

**Chlorine Dioxide
Chlordioxid
Dióxido De Cloro
Dioxyde De Chlore
Biossido Di Cloro**

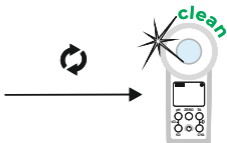
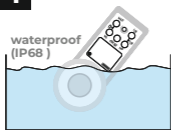
0.00 – 11.40 ppm (mg/l)

DPD N°1 Photometer (DPD 1A + 1B Liquid)
Glycine*



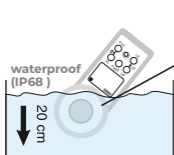
*not part of standard equipment

1



2

Take 10 ml Water Sample



3

**ZERO!
(p.18)**



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".

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.

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".

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».

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".

A

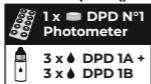
With Chlorine | Mit Chlor
Con Cloro | Avec Du Chlore | Con il Cloro

4A

1 x Glycine*

**5A****Use Force!**Completely
Dissolved**NO
Residue****6A**

Tablet Or Liquid? (p. 10)

1 x DPD N°1
Photometer3 x DPD 1A +
3 x DPD 1B**7A****Use Force!**Completely
Dissolved**NO
Residue**


Cl. Dioxide | Chlordioxid | Dióxido De Cl.
Dioxyde De Cl. | BioSSido Di Cl.



B

Without Chlorine | Ohne Chlor
Sin Cloro | Sans Chlore | Senza Cloro

4B

Tablet Or Liquid? (p. 10)

1 x  DPD N°1
Photometer

3 x  DPD 1A +
3 x  DPD 1B



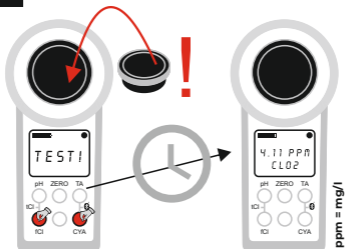
5B



Completely
Dissolved



8A/6B



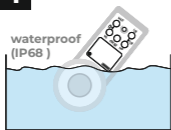
Cyanuric Acid
Cyanursäure
Ácido Cianúrico
Acide Nurique
Acido Cianurico

0 – 160 ppm (mg/l)

CYA-Test Photometer

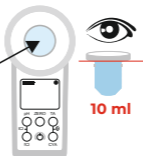
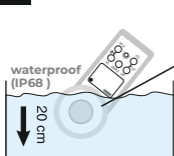


1



2

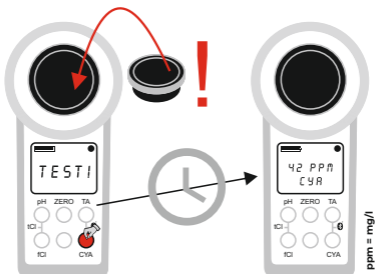
Take 10 ml Water Sample



3

ZERO!
(p.18)



4**1 x CYA-Test
Photometer****5****Completely
Dissolved****6**

Hydrogen Peroxide Wasserstoffperoxid Peróxido De Hidrógeno Peroxyde D'Hydrogène Perossido Di Idrogeno (LR)

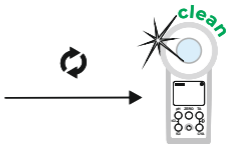
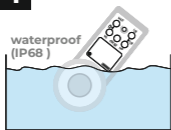
0.00 – 2.90 ppm (mg/l)

Hydr. Peroxide LR Photometer*

0.00 1.45 2.90 → OR

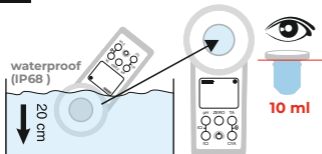
1

*not part of standard equipment



2

Take 10 ml Water Sample



3

ZERO!
(p.18)

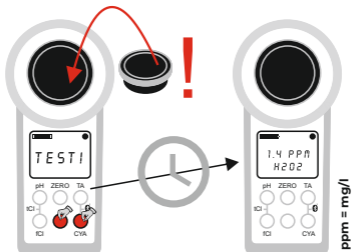


4

1 x Hydr. Peroxide
LR Photometer*

**5**

completely
dissolved

**6**

Hydrogen Peroxide Wasserstoffperoxid Peróxido De Hidrógeno Peroxyde D'Hydrogène Perossido Di Idrogeno (HR)

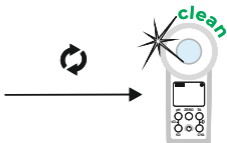
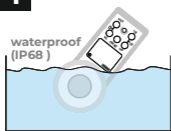
0 – 200 ppm (mg/l)

Hydr. Peroxide HR Photometer*
Acidifying PT*



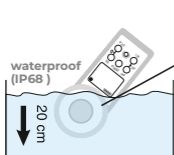
1

*not part of standard equipment



2

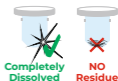
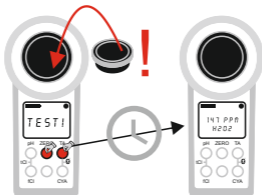
Take 10 ml Water Sample



3

ZERO!
(p.18)



4**1 x Acidifying PT*****5****6****1 x Hydr. Peroxide HR Photometer*****7****8**

ppm = mg/l

Ozone Ozon Ozono

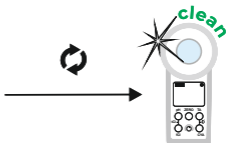
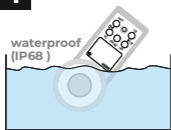
0.00 – 4.00 ppm (mg/l)

DPD N°1 Photometer (DPD 1A + 1B Liquid)
DPD N°3 Photometer (DPD 3C Liquid)
Glycine*

0.00 2.00 4.00 → OR

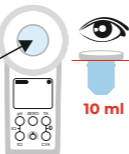
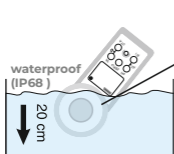
1

*not part of standard equipment



2

Take 10 ml Water Sample



3

ZERO!
(p.18)



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".

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.

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".

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».

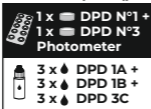
Solo quando il campione di acqua contiene Ozono e cloro (entrambi disinfettanti vengono usati), deve essere utilizzato il metodo "B" e la pasticca Glycine* deve essere applicata. Se il campione contiene solo Ozono e non contiene cloro, si prega la procedura metodo "A".

A

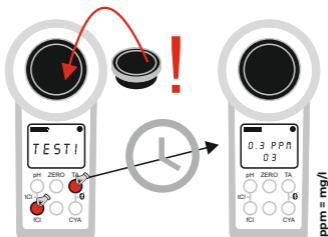
Without Chlorine | Ohne Chlor
Sin Cloro | Sans Chlore | Senza Cloro

4A

Tablet Or Liquid? (p. 10)

**5A**

Completely
Dissolved

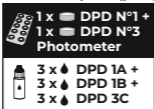
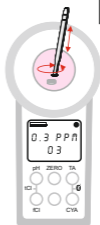
**6A**

B

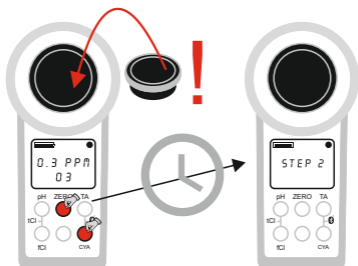
With Chlorine | Mit Chlor
Con Cloro | Avec Du Chlore | Con il Cloro

4B

Tablet Or Liquid? (p. 10)

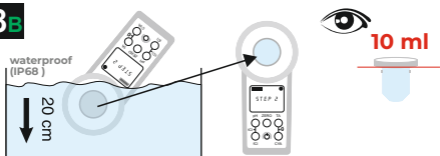
**5B**

Completely
Dissolved

**6B**

B

With Chlorine | Avec Du Chlore
 Con Cloro | Mit Chlor | Con il Cloro

7B**8B****9B**

1 x Glycine*

**10B**

Completely
Dissolved

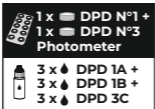


B

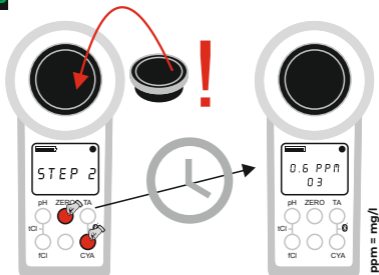
With Chlorine | Avec Du Chlore
Con Cloro | Mit Chlor | Con il Cloro

11B

Tablet Or Liquid? (p. 10)

**12B**

Completely
Dissolved

**13B**

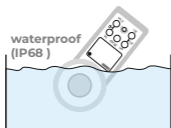
pH

6.50 – 8.40 pH

Phenol Red Photometer
(Phenol Red Liquid)

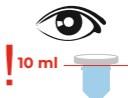
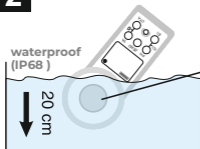


1



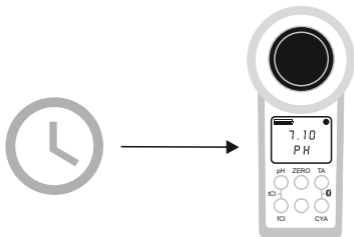
2

Take 10 ml Water Sample



3**ZERO! (p.18)****4****Tablet Or Liquid? (p. 10)****1 x** Phenol Red Photometer**6 x** Phenol Red**5****Completely Dissolved****NO Residue****6**

7



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.

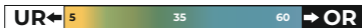
Der Alkalinitätswert muss mindestens 50 mg/l betragen, um eine korrekte pH Messung durchzuführen.

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

PHMB

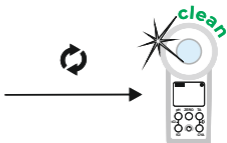
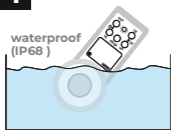
5 – 60 ppm (mg/l)

PHMB Photometer*



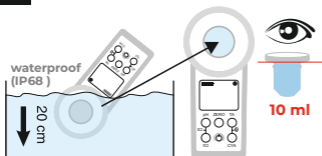
*not part of standard equipment

1



2

Take 10 ml Water Sample

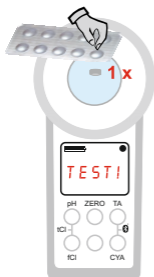


3

ZERO!
(p.18)



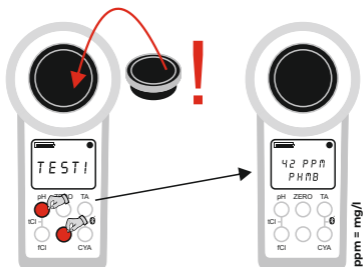
4

1 x PHMB
Photometer

5

Completely
Dissolved

6



ppm = mg/l

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.

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 Calcium-Härte-Werte $<> 200$ mg/l können zu Messwertabweichungen führen.

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.

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.

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/l e i valori di durezza del calcio $<> 200$ mg/l possono portare a deviazioni del valore misurato.

Total Hardness
Gesamthärte
Durezza Total
Dureté Totale
Durezza Totale

0 – 500 ppm (mg/l)

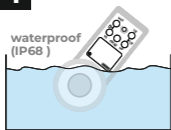
POL20TH1*

POL10TH2*



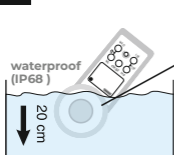
*not part of standard equipment

1



2

Take 10 ml Water Sample

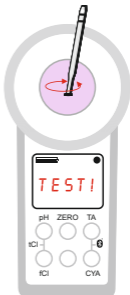
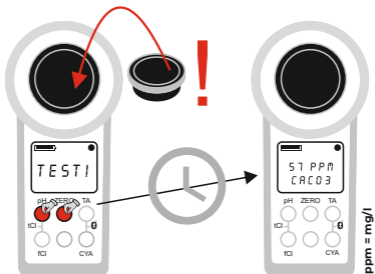


10 ml

3

ZERO!
(p.18)



4POL20TH1*
POL10TH2**Shake
Before
Use!**5****6**

Urea Harnstoff Urée

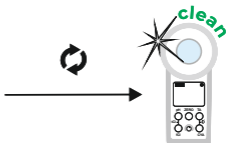
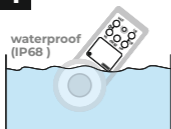
0.1 – 2.5 ppm (mg/l)

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



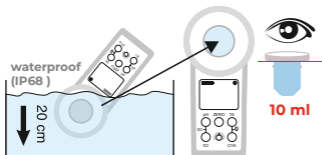
*not part of standard equipment

1



2

Take 10 ml Water Sample



3

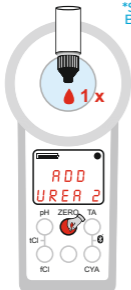
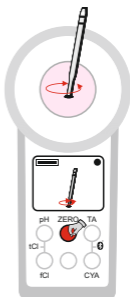
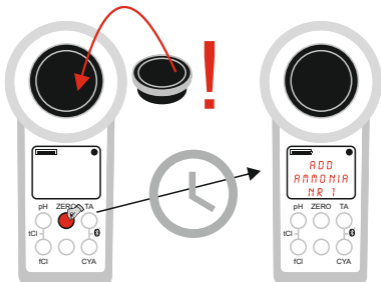
ZERO!
(p.18)



4**5****1 x Dechlor****6****7****8**

PL Urea 1*
*Shake Before Use!

9

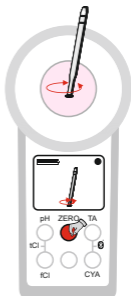
10**PL Urea 2****Shake
Before
Use!**11****12**

13

Ammonia N°1



14

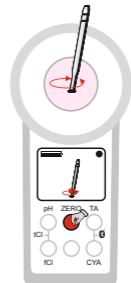


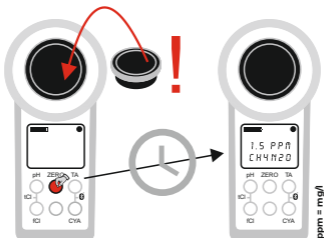
15

Ammonia N°2



16





If the sample contains free chlorine, a „Dechlor“ tablet has to be added to the vial, before adding PL Urea 1 and PL Urea 2. Ammonia N° 1 only dissolves entirely after Ammonia N° 2 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 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.

Wenn die Probe freies Chlor enthält, muss vor der Zugabe von PL Urea 1 und PL Urea 2 eine „Dechlor“-Tablette in die Küvette gegeben werden. Ammonia N°1 löst sich erst ganz auf, nachdem Sie Ammonia N°2 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 Ammonia N°1 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.

Si la muestra contiene cloro libre, hay que añadir una pastilla de "Dechlor" al vial, antes de añadir PL Urea 1 y PL Urea 2. Ammonia N°1 no se disuelve por completo hasta que agregue Ammonia N° 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 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.

Si l'échantillon contient du chlore libre, une pastille "Dechlor" doit être ajoutée au flacon, avant l'ajout de PL Urée 1 et PL Urée 2. Ammonia N° 1 se dissout complètement une fois y avoir ajouté 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 spéciales avant d'y ajouter 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.

Se il campione contiene cloro libero, una compressa "Dechlor" deve essere aggiunta alla fiala, prima di aggiungere PL Urea 1 e PL Urea 2. Ammoniacca n° 1 si dissolve completamente solo dopo aver aggiunto la Ammoniacca n° 2. L'ammoniacca e le clorammine vengono rilevate insieme. Il risultato visualizzato è quindi la somma die 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 di ammoniacca 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.

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 (Oberhalb des Messbereichs) / UR = Underrange (Unterhalb des Messbereichs)

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 (Por encima del rango de medición) / UR = Underrange (Por debajo del rango de medición)

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 (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 (Sopra il campo di misura) / UR = Underrange (Al di sotto del campo di misura)

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".



BAT!:



Change batteries | Batterien wechseln | Cambiar las pilas | Changer les piles | Cambiare le batterie

Err02:

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

Err03:



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

Err04:

Repeat ZERO and TEST | ZERO und TEST wiederholen | Repite ZERO y TEST | Répéter ZERO et TEST | Ripetere ZERO e TEST

Err05:

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

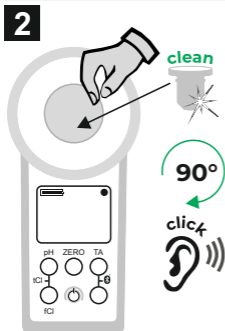
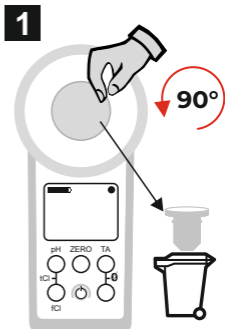
1) 01.01.1970: The date on the PoolLab 1.0[®] is set to 01.01.1970 when delivered, after each battery change and after each update. Please reconnect to the LabCOM app so that the smartphone date is adopted again. **2)** Ideal values: Please contact the supplier of your pool chemistry to ask for ideal values for your pool. **3)** Scratched cuvette: As long as the cuvette is not scratched in the upper third but only in the bottom area, it does not have to be changed. **4)** Please crush tablets vigorously with the stirring rod. The cuvette will not break **5)** Total chlorine may well be displayed lower than the free chlorine within the tolerances shown in these instructions. **6)** Humidity in the display: Can occur if the residual humidity in the housing condenses due to the cold water during immersion.

1) 01.01.1970: Das Datum auf dem PoolLab 1.0[®] ist im Auslieferungszustand, nach jedem Batteriewechsel und nach jedem Update auf 01.01.1970 eingestellt. Bitte erneut mit der LabCOM App verbinden, damit das Smartphone Datum neu übernommen wird. **2)** Idealwerte: Bitte wenden Sie sich an den Lieferanten Ihrer Pool-Chemie, um Idealwerte für Ihren Pool zu erfragen. **3)** Verkratzte Küvette: Solange die Küvette nicht im oberen Drittel sondern nur im Bodenbereich verkratzt ist, muss diese nicht gewechselt werden. **4)** Tabletten bitte mit dem Rührstab kräftig zerdrücken. Die Küvette geht nicht kaputt. **5)** Gesamtchlor kann im Rahmen der in dieser Anleitung abgebildeten Toleranzen durchaus niedriger angezeigt werden, als das freie Chlor. **6)** Feuchtigkeit im Display: Kann auftreten, wenn die Rest-Luftfeuchte im Gehäuse durch das kalte Wasser beim Eintauchen kondensiert

1) 01.01.1970: La fecha del PoolLab 1.0[®] se ajusta al 01.01.1970 en el momento de la entrega, después de cada cambio de batería y después de cada actualización. Por favor, vuelva a conectarse con la aplicación LabCOM para que se adopte de nuevo la fecha del smartphone. **2)** Valores ideales: Póngase en contacto con el proveedor de productos químicos de su piscina para solicitar los valores ideales para su piscina. **3)** Ampolla rayada: Mientras la ampolla no esté rayada en el tercio superior sino sólo en la zona inferior, no es necesario sustituirla. **4)** Aplastar las pastillas energicamente con la varilla agitadora. La cubeta no se rompe **5)** El cloro total puede mostrarse más bajo que el cloro libre dentro de las tolerancias indicadas en este manual. **6)** Humedad en la pantalla: Puede ocurrir si la humedad residual en la carcasa se condensa debido al agua fría durante la inmersión.

1) 01.01.1970: la date du PoolLab 1.0® est réglée sur le 01.01.1970 à la livraison, après chaque changement de batterie et après chaque mise à jour. Veuillez vous reconnecter avec l'application LabCOM pour que la date du smartphone soit à nouveau adoptée. **2)** Valeurs idéales: Veuillez contacter le fournisseur de la chimie de votre piscine pour demander les valeurs idéales pour votre piscine. **3)** Flacon rayé: tant que le flacon n'est pas rayé dans le tiers supérieur mais seulement dans la zone inférieure, il n'est pas nécessaire de le remplacer. **4)** Veuillez écraser vigoureusement les comprimés à l'aide de l'agitateur. La cuvette ne se brisera pas **5)** Le chlore total peut être affiché plus bas que le chlore libre dans les limites des tolérances indiquées dans ce manuel. **6)** Humidité dans l'écran: peut se produire si l'humidité résiduelle dans le boîtier se condense à cause de l'eau froide pendant l'immersion.

1) 01.01.1970: La data del PoolLab 1.0® è impostata al 01.01.1970 alla consegna, dopo ogni cambio di batteria e dopo ogni aggiornamento. Si prega di ricollegarsi con l'App LabCOM in modo che la data dello smartphone venga adottata di nuovo. **2)** Valori ideali: contattate il fornitore della chimica della vostra piscina per chiedere i valori ideali per la vostra piscina. **3)** Fiala graffiata: finché la fiala non è graffiata nel terzo superiore ma solo nella zona inferiore, non è necessario sostituirla. **4)** Schiacciare vigorosamente le compresse con la bacchetta. La cuvetta non si rompe **5)** Il cloro totale può essere visualizzato inferiore al cloro libero entro le tolleranze indicate in questo manuale. **6)** Umidità nel display: può verificarsi se l'umidità residua nella custodia si condensa a causa dell'acqua fredda durante l'immersione.

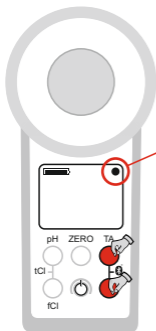


Reagents | Reagenzien | Reactivos | Réactifs | Reagenti

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 CYA-Test Photometer
TbsPHP50	50 x Hydr. Peroxide LR Phot.
TbsPHPHR50	50 x Hydr. Peroxide HR Phot.
TbsHAPP50	50 x Acidifying PT Photometer
TbsPTA50	50 x Alkalinity-M Photometer
TbsHGC50	50 x Glycine
PPHAM150	50 x Ammonia N° 1 Powder Pillows
PPPAM250	50 x Ammonia N° 2 Powder Pillows
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
TbsPPB50	50 x PHMB Photometer
TbsHDC50	50 x Dechlor

**Spare parts | Ersatzteile | Piezas de repuesto | Pièces de rechange |
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



- **Bluetooth ON**
- **Bluetooth OFF**

Windows/MacOS:



www.poollab.org



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

Active Oxygen (MPS) | Aktivsauerstoff (MPS)
Oxígeno Activo (MPS) | Oxygène Actif (MPS)
Ossigeno Attivo (MPS)

Range	±
0.0 – 5.0	0.5 ppm (mg/l)
5.0 – 15.0	1.3 ppm (mg/l)
15.0 – 25.0	3.8 ppm (mg/l)
25.0 – 30.0	5.0 ppm (mg/l)

Alkalinity | Alkalinität | Alcalinidad
Alcalinité | Alcalinità

Range	±
0 – 30	3 ppm (mg/l)
30 – 60	7 ppm (mg/l)
60 – 100	12 ppm (mg/l)
100 – 200	18 ppm (mg/l)

Bromine | Brom | Bromo | Brome | Bromo

Range	±
0.0 – 2.5	0.2 ppm (mg/l)
2.5 – 6.5	0.6 ppm (mg/l)
6.5 – 11.0	1.7 ppm (mg/l)
11.0 – 13.5	2.3 ppm (mg/l)

Calcium Hardness | Kalziumhärte
Durezza De Calcio | Dureté Calcique
Durezza Del Calcio

Range	±
0 – 25	8 ppm (mg/l)
25 – 100	22 ppm (mg/l)
100 – 300	34 ppm (mg/l)
300 – 500	45 ppm (mg/l)

Chlorine | Chlor | Cloro | Chlore | Cloro

Range	±
0.00 – 2.00	0.10 ppm (mg/l)
2.00 – 3.00	0.23 ppm (mg/l)
3.00 – 4.00	0.75 ppm (mg/l)
4.00 – 8.00	1.00 ppm (mg/l)

Cyanuric Acid | Cyanursäure
Ácido Cianúrico | Acide Nuriqne
Acido Cianurico

Range	±
0 – 15	1 ppm (mg/l)
15 – 50	5 ppm (mg/l)
50 – 120	13 ppm (mg/l)
120 – 160	19 ppm (mg/l)

Chlorine Dioxide | Chlordioxid
Dióxido De Cloro | Dioxyde De Chlore
Biossido Di Cloro

Range	±
0.00 – 2.00	0.19 ppm (mg/l)
2.00 – 6.00	0.48 ppm (mg/l)
6.00 – 10.00	1.43 ppm (mg/l)
10.00 – 11.40	1.90 ppm (mg/l)

Hydrogen Peroxide | Wasserstoffperoxid
Peróxido De Hidrógeno | Peroxyde D'Hydrogène
Perossido Di Idrogeno – (LR)

Range	±
0.00 – 0.50	0.05 ppm (mg/l)
0.50 – 1.50	0.12 ppm (mg/l)
1.50 – 2.00	0.36 ppm (mg/l)
2.00 – 2.90	0.48 ppm (mg/l)

Hydrogen Peroxide | Wasserstoffperoxid
Peróxido De Hidrógeno | Peroxyde D'Hydrogène
Perossido Di Idrogeno – (HR)

Range	±
0 – 50	5 ppm (mg/l)
50 – 110	6 ppm (mg/l)
110 – 170	11 ppm (mg/l)
170 – 200	13 ppm (mg/l)

Ozone | Ozon | Ozono

Range	±
0.00 – 1.00	0.07 ppm (mg/l)
1.00 – 2.00	0.17 ppm (mg/l)
2.00 – 3.00	0.51 ppm (mg/l)
3.00 – 4.00	0.68 ppm (mg/l)

pH

Range	±
6.50 – 8.40	0.11 pH

PHMB

Range	±
5 – 60	5 ppm (mg/l)

**Total Hardness | Gesamthärte | Durezza Total
Dureté Totale | Durezza Totale**

Range	±
0 – 30	3 ppm (mg/l)
30 – 60	5 ppm (mg/l)
60 – 100	10 ppm (mg/l)
100 – 200	17 ppm (mg/l)
200 – 300	22 ppm (mg/l)
300 – 500	58 ppm (mg/l)

Urea | Harnstoff | Urée

Range	±
0.00 – 0.30	0.05 ppm (mg/l)
0.30 – 0.60	0.06 ppm (mg/l)
0.60 – 1.00	0.09 ppm (mg/l)
1.00 – 1.50	0.12 ppm (mg/l)
1.50 – 2.50	0.19 ppm (mg/l)

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

The manufacturer
**Water-i.d. GmbH, Daimlerstr. 20,
D-76344 Eggenstein-Leopoldshafen
Federal Republic of Germany**



represented by the general manger **Dipl. Ec. Andreas Hock** here-with declares as follows:

The product "PoolLab® 1.0" complies with the requirements of the following standards for:

ETSI EN 300 328 (V2.2.2)
EN 62479 (2010)
ETSI EN 301 489-1 (V2.2.3)
ETSI EN 301 489-17 (3.2.4)
EN 61326 (2013)
EN IEC 62368-1:2020+A11:2020

UK Conformity Assessed



We, Water-i.d. GmbH Germany, hereby certify our responsibility, that the following product: PrimeLab 2.0 Photometer, is tested to and conforms with the essential test suites included in the following standards, which are in force within the UK:

Standards

Regulations 2016 (S.I. 2016/1091);
 EN 61000-3-2: 2014; EN 61000-3-3: 2013;
 ETSI EN 301 489-1 V2.2.3: 2019;
 ETSI EN 301 489-17 V3.2.4: 2020;
 Regulations 2016 (S.I. 2016/1101)
 EN IEC 62368:1:2020+A11:2020
 Regulations 2017 (S.I. 2017/1206)
 ETSI EN 300 328 V2.2.2: 2019;

Legislation Number

And therefore complies with the essential requirements of the following directives:

Legislation Name

Further identification

Electromagnetic Regulations 2016
 (EMC)
 Compatibility Regulations
 Electrical Equipment
 Safety
 (Safety) Regulations
 Radio Equipment
 Radio Equipment
 Regulations (S.I. 2017/1206)
 Restriction of the Use
 of Certain Hazardous
 RoHS
 Substances in Electrical
 and Electronic Equipment
 Regulations

Legislation Number

Electromagnetic Compatibility
 (S.I. 2016/1091)
 Regulations 2016
 (S.I. 2016/1101)
 Regulations 2017
 Regulations 2012
 (S.I. 2012/3032)

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.

This device complies with Industry Canada's RSS for licence-exempt radio equipment. Operation is permitted under the following two conditions: (1) this device may not cause interference, and (2) the user of this device must accept any radio interference received, even if the interference is likely to affect the operation of the device.

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.

This device complies with FCC and Industry Canada RF radiation exposure limits established for the general public. (Uncontrolled Environment) This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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



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
76344 Eggenstein | Germany

S/N
Manufacturing date

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