

visicolor® Powder Pillows

Sulfat

Reagenziensatz zur photometrischen Bestimmung von Sulfat in Oberflächen-, Grund- und Trinkwasser.

Messbereich:

15–200 mg/L SO_4^{2-}

Methode:

Photometrische Bestimmung von Sulfat durch Fällung als Bariumsulfat und Messung der dadurch entstandenen Trübung.

Gefahrenhinweis:

Informationen zu Gefahren finden Sie auf dem Außenetikett und im Sicherheitsdatenblatt. Das Sicherheitsdatenblatt können Sie unter www.mn-net.com/SDS herunterladen.

Ausführung:

Benötigtes Zubehör: 2 Reaktionsgläser 16 mm AD (REF 91680) oder 2 Reaktionsgläser 24 mm (REF 936101)

- 1 Reaktionsglas mehrmals mit der Wasserprobe spülen (der pH-Wert der Probe muss zwischen pH 1 und 11 liegen)

Null (optional):

- 2 Eine Rundkuvette mit 5 mL Probe füllen
- 3 Rundkuvette von außen säubern
- 4 Rundkuvette in das Photometer einsetzen und Null-Messung durchführen

Probe:

- 5 In eine weitere Rundkuvette den Inhalt eines Powder Pillows vorlegen
- 6 5 mL Probe hinzufügen
- 7 Rundkuvette verschließen und kräftig schütteln
- 8 Rundkuvette von außen säubern
- 9 Reaktionszeit 10 min abwarten
- 10 Messen

Messung:

Siehe Handbuch für MACHEREY-NAGEL Photometer.

Nach Gebrauch Rundkuvette gründlich spülen und verschließen.

Diese Methode ist auch für die Analyse von Meerwasser geeignet.

Störungen:

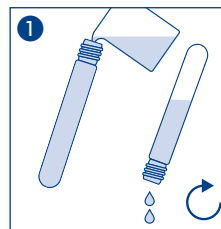
Die Temperatur der Wasserprobe soll zwischen 20 °C und 30 °C liegen.

Es stören nicht:

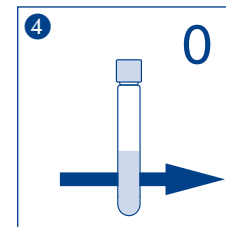
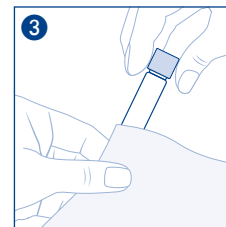
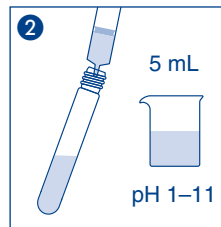
< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Entsorgung:

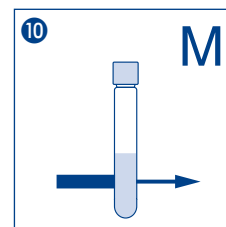
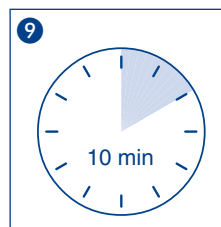
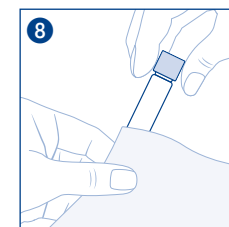
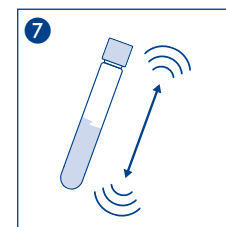
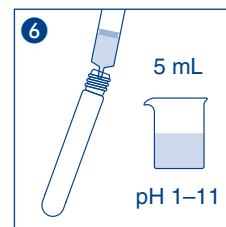
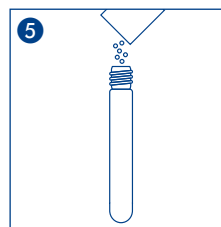
Informationen zur Entsorgung entnehmen Sie bitte dem Sicherheitsdatenblatt. Das Sicherheitsdatenblatt können Sie unter www.mn-net.com/SDS herunterladen.



Null (optional):



Probe:



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Deutschland

Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

Schweiz: MACHEREY-NAGEL AG · Hirsackerstr. 7 · 4702 Oensingen · Schweiz

Tel.: 062 388 55 00 · sales-ch@mn-net.com

visicolor® Powder Pillows

Sulfate

Reagent for the photometric determination of sulfate ions in surface, ground and drinking water.

Measuring range:

15–200 mg/L SO_4^{2-}

Method:

Photometric determination of sulfate ions via precipitation of bariumsulfate and measurement of the resulting turbidity.

Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Procedure:

Requisite accessories: 2 test tubes 16 mm OD (REF 91680) or 2 test tubes 24 mm OD (REF 936101)

- 1 Rinse test tube several times with sample (*pH value of sample must be between pH 1 and 11*)

Blank (optional):

- 2 Fill one test tube with 5 mL of sample
- 3 Clean test tube
- 4 Place test tube in photometer as blank value and adjust for zero

Sample:

- 5 Place the contents of **one Powder Pillow** in a further round cell
- 6 Add 5 mL of the sample
- 7 Close test tube and shake well
- 8 Clean test tube
- 9 Wait for 10 min
- 10 Measure

Measurement:

See manual for all MACHEREY-NAGEL photometers.

After use, rinse out test tubes thoroughly and seal them.

This method is also suitable for the analysis of sea water.

Interferences:

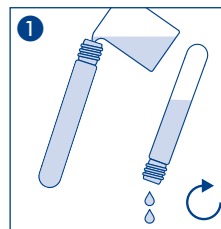
The temperature of the water sample should be between 20 °C and 30 °C.

The following quantities of ions will not interfere:

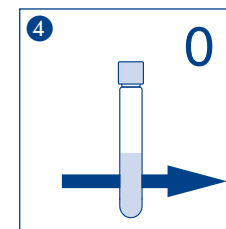
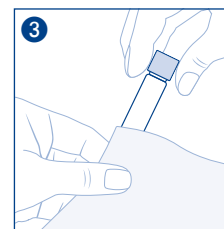
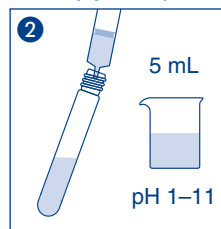
< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Disposal of samples:

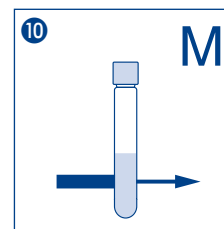
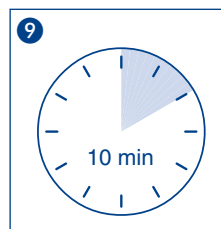
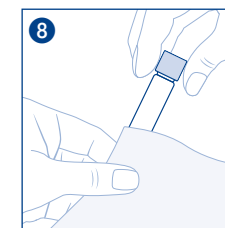
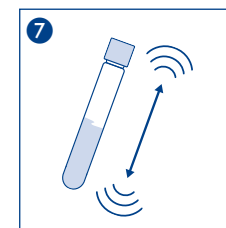
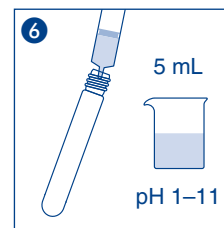
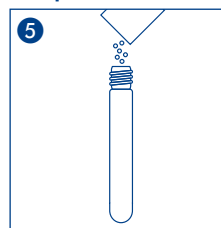
Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.



Blank (optional):



Sample:



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Germany
Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

visicolor® Powder Pillows

Sulfate

Réactif pour la détermination photométrique du sulfate dans les surfaces, le sol et l'eau potable.

Domaine de mesure :

15–200 mg/L SO_4^{2-}

Méthode :

Détermination photométrique du sulfate par précipitation sous forme de sulfate de baryum et mesure de la turbidité en résultant.

Avertissement : danger :

Vous trouverez des informations sur les risques sur l'étiquette de l'emballage et dans la fiche de données de sécurité. Vous trouverez la fiche de données de sécurité sur le site www.mn-net.com/SDS pour la télécharger.

Exécution :

Accessoires nécessaires : 2 cuves de réaction de 16 mm de diamètre extérieur (REF 96180) ou 2 cuves de réaction de 24 mm de diamètre extérieur (REF 936101)

- 1 Rincer plusieurs fois la cuve de réaction avec l'échantillon d'eau (le pH de l'échantillon doit se situer entre 1 et 11)

Blanc (en option) :

- 2 Remplir une cuve ronde avec un échantillon de 5 mL
- 3 Nettoyer l'extérieur de la cuve ronde
- 4 Placer la cuve ronde dans le photomètre et procéder à la mesure du point zéro

Echantillon :

- 5 Verser le contenu d'un Powder Pillow dans une autre cuve ronde
- 6 Ajouter 5 mL d'échantillon
- 7 Fermer la cuve ronde et secouer énergiquement
- 8 Nettoyer l'extérieur de la cuve ronde
- 9 Temps de réaction : attendre 10 min
- 10 Mesurer

Mesure :

Se reporter au manuel du photomètre de MACHEREY-NAGEL.

Après utilisation, rincer à fond les cuves rondes et les fermer.

Cette méthode est également appropriée pour analyser l'eau de mer.

Interférences :

La température de l'échantillon d'eau doit se situer entre 20 °C et 30 °C.

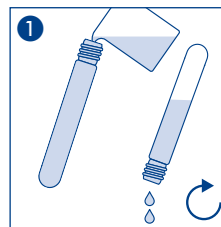
Les quantités d'ions suivantes n'interféreront pas :

< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^- :

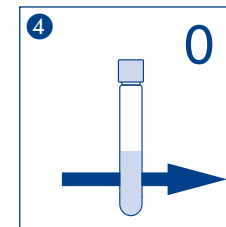
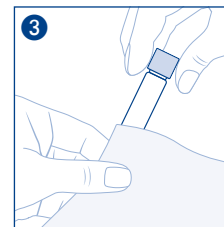
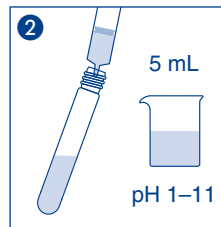
Elimination des échantillons :

Vous trouverez des informations concernant l'élimination des produits dans la fiche de données de sécurité.

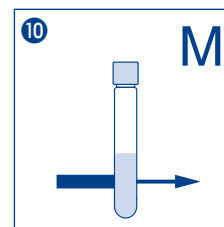
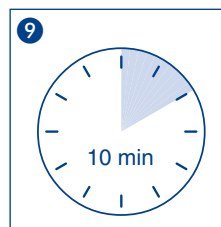
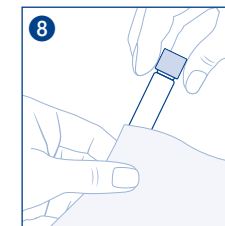
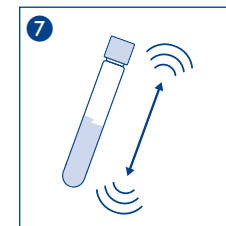
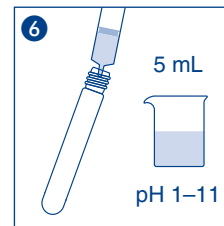
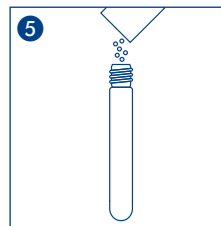
Vous trouverez la fiche de données de sécurité sur le site www.mn-net.com/SDS pour la télécharger.



Blanc (en option) :



Echantillon :



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Allemagne
Tél. : +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

France : MACHEREY-NAGEL SAS · 1, rue Gutenberg – BP135 · 67720 Hoerd · France
Tél. : 03 88 68 22 68 · sales-fr@mn-net.com

MACHEREY-NAGEL SAS (Société par Actions Simplifiée) au capital de 186600 €
Siret 379 859 531 00020 · RCS Strasbourg B379859531 · N° intracommunautaire FR04 379 859 531

Rev 2023-07 / 936223

visicolor® Powder Pillows

Sulfato

Reactivo para la determinación fotométrica de sulfato en agua superficial, agua de suelos y agua potable.

Rango de medida:

15–200 mg/L SO_4^{2-}

Método:

Determinación fotométrica de sulfato por precipitación como sulfato de bario y medida de la turbidez así generada.

Advertencia sobre riesgos:

Encontrará la información sobre los riesgos en la etiqueta exterior y en la ficha de datos de seguridad. Puede descargar la ficha de datos de seguridad en www.mn-net.com/SDS.

Procedimiento:

Accesorios necesarios: 2 tubos de ensayo de 16 mm DE (REF 91680) o 2 tubos de ensayo de 24 mm DE (REF 936101)

- 1 Lave el tubo de ensayo varias veces con la muestra de agua (*el valor del pH de la muestra debe hallarse entre 1 y 11*)

Blanco (opcional):

- 2 Llene un tubo de ensayo con 5 mL de muestra
- 3 Limpie el tubo de ensayo por el exterior
- 4 Inserte el tubo de ensayo en el fotómetro y mida el blanco

Muestra:

- 5 Introduzca el contenido de un Powder Pillow en otra cubeta redonda
- 6 Añada 5 mL de la muestra
- 7 Cierre el tubo de ensayo y agítela bien
- 8 Limpie el tubo de ensayo por el exterior
- 9 Espere un tiempo de reacción de 10 min
- 10 Realice la medición

Medición:

Consulte el manual del fotómetro MACHEREY-NAGEL.

Tras el uso, limpie a fondo el tubo de ensayo y ciérrelo.

Este método también resulta adecuado para el análisis del agua de mar.

Interferencias:

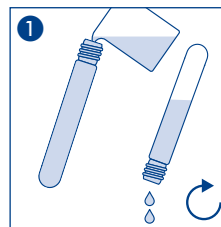
La temperatura de la muestra de agua debe hallarse entre 20 °C y 30 °C.

No interfieren:

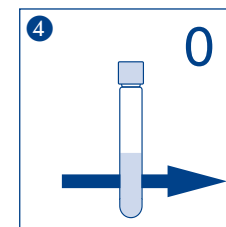
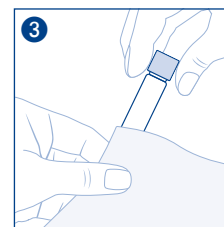
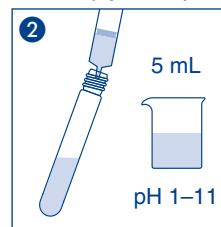
< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Eliminación:

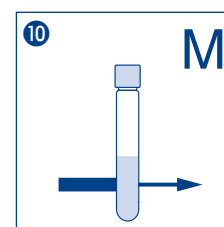
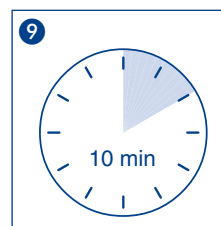
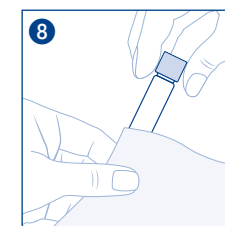
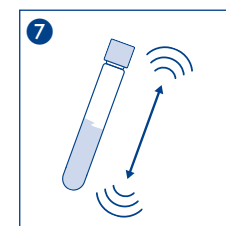
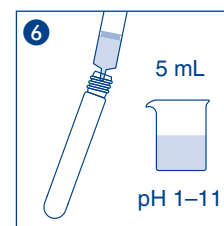
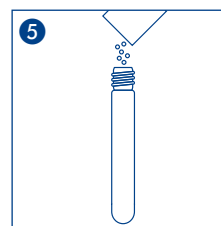
Consulte la información sobre la eliminación en la ficha de datos de seguridad. Puede descargar la ficha de datos de seguridad en www.mn-net.com/SDS.



Blanco (opcional):



Muestra:



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Alemania
Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

visicolor® Powder Pillows

Sulfaat

Reagenskit voor de fotometrische bepaling van sulfaat in oppervlakte-, grond- en drinkwater.

Meetgebied:

15–200 mg/L SO_4^{2-}

Methode:

Fotometrische bepaling van sulfaat door neerslag als bariumsulfaat en meting van de daardoor ontstane troebelheid.

Voorzorgsmaatregelen:

Informatie over de gevaren vindt u op het verpakkingsetiket en het veiligheidsinformatieblad. U kunt het veiligheidsinformatieblad downloaden van www.mn-net.com/SDS.

Procedure:

Benodigde hulpmiddelen: 2 reageerbuisen 16 mm BD (REF 91680) of 2 reageerbuisen 24 mm BD (REF 936101)

- 1 Reageerbuis meerdere malen met het watermonster spoelen (de pH-waarde van het monster moet tussen pH 1 en 11 liggen)

Nul (optioneel):

- 2 Een reageerbuis met 5 mL monster vullen
- 3 Buitenkant van de reageerbuis schoonmaken
- 4 Reageerbuis in de fotometer plaatsen en nulmeting uitvoeren

Monster:

- 5 De inhoud van een Powder Pillow in een andere reageerbuis doen
- 6 5 mL van het monster toevoegen
- 7 Reageerbuis sluiten en krachtig schudden
- 8 Buitenkant van de reageerbuis schoonmaken
- 9 Reactietijd van 10 min afwachten
- 10 Meten

Meting:

Zie handboek voor MACHEREY-NAGEL fotometer.

Na gebruik reageerbuis grondig spoelen en sluiten.

Deze methode is ook geschikt voor de analyse van zeewater.

Storingen:

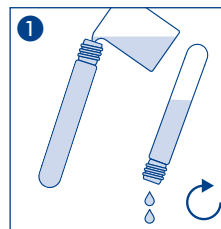
De temperatuur van het watermonster moet tussen 20 °C en 30 °C liggen.

De volgende concentraties storen de uitkomst van de test niet:

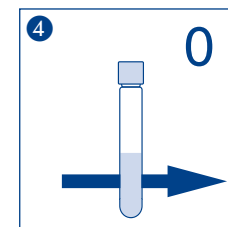
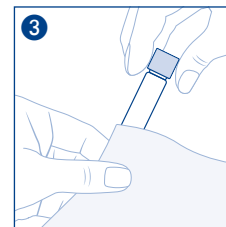
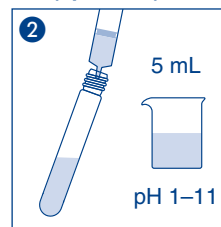
< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Afvalverwerking:

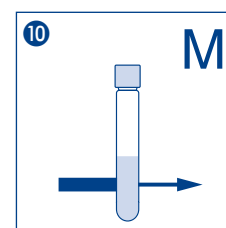
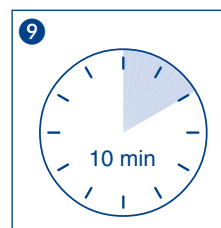
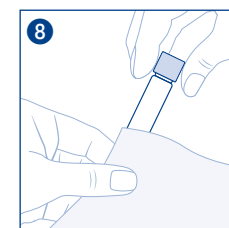
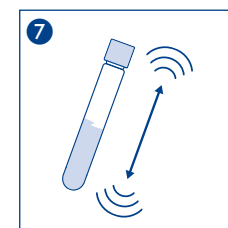
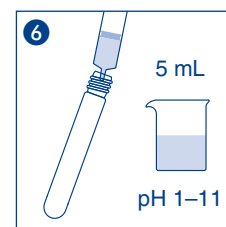
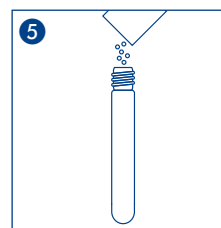
Raadpleeg het veiligheidsinformatieblad voor informatie over de afvoer. U kunt het veiligheidsinformatieblad downloaden van www.mn-net.com/SDS.



Nul (optioneel):



Monster:



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Duitsland
Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

visocolor® Powder Pillows

Sulfato

Reagente utilizzato per la determinazione fotometrica del solfato nelle acque superficiali, sotterranee e potabili.

Intervallo di valori:

15–200 mg/L SO_4^{2-}

Metodo:

Determinazione fotometrica del solfato mediante precipitazione del solfato di bario e misurazione della torbidità risultante.

Avvisi di pericolo:

Per informazioni sui pericoli, leggere l'etichetta esterna e consultare la scheda di sicurezza. La scheda di sicurezza può essere scaricata dal sito www.mn-net.com/SDS.

Procedimento:

Materiali necessari: 2 cuvette di reazione da 16 mm DE (diametro esterno) (REF 91680) o 2 cuvette di reazione da 24 mm DE (diametro esterno) (REF 936101)

- 1 Risciacquare più volte la cuvetta di reazione con il campione di acqua (*il valore del pH del campione deve essere compreso tra 1 e 11*)

Bianco (opzionale):

- 2 Versare 5 mL di campione in una cuvetta tonda
- 3 Pulire l'esterno della cuvetta tonda
- 4 Posizionare nel fotometro la cuvetta tonda da considerare come valore bianco e impostare lo zero

Campione:

- 5 Mettere in un'altra cuvetta tonda il contenuto di un Powder Pillow
- 6 Aggiungere 5 mL di campione
- 7 Sigillare la cuvetta tonda e agitare vigorosamente
- 8 Pulire l'esterno della cuvetta tonda
- 9 Attendere il tempo di reazione di 10 min
- 10 Misurare

Misura:

Fare riferimento al manuale relativo ai fotometri MACHEREY-NAGEL. Dopo l'utilizzo, risciacquare accuratamente e sigillare le cuvette tonde. Questo metodo è adatto anche per l'analisi di acque marine.

Interferenze:

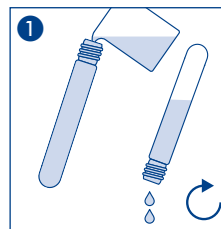
La temperatura del campione di acqua dovrebbe essere compresa tra i 20 °C e i 30 °C.

Nessuna interferenza nei seguenti casi:

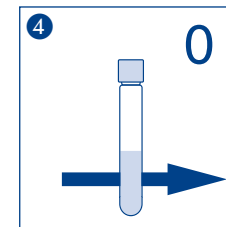
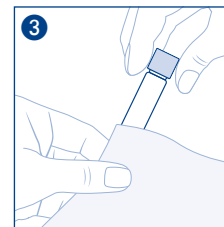
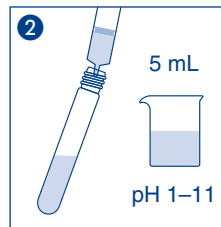
< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Smaltimento dei campioni:

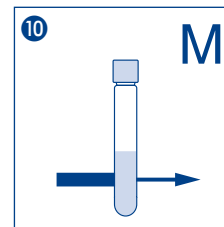
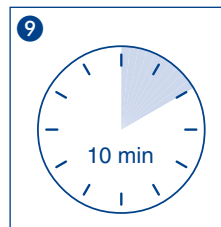
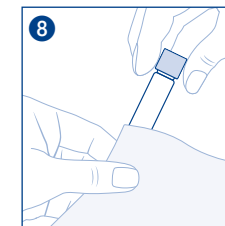
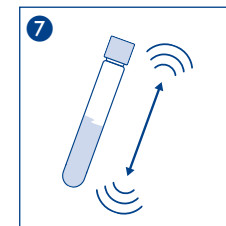
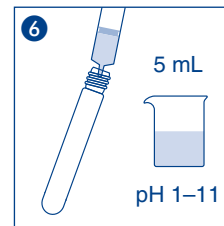
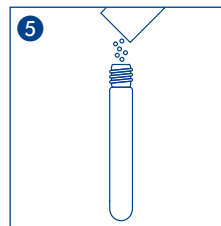
Per informazioni sullo smaltimento, consultare la scheda di sicurezza. La scheda di sicurezza può essere scaricata dal sito www.mn-net.com/SDS.



Bianco (opzionale):



Campione:



MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Germania
Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com

visicolor® Powder Pillows

Sulfato

Reagente para a determinação fotométrica de íons sulfato em água subterrânea, superficial e potável.

Faixa de medição:15–200 mg/L SO_4^{2-} **Método:**

Determinação fotométrica de íons sulfato por meio da precipitação de sulfato de bário e medição da turbidez resultante.

Alerta de perigo:

Informações relativas à segurança podem ser encontradas na etiqueta da embalagem e na FISPQ. Você pode baixar a FISPQ em www.mn-net.com/SDS.

Procedimento:

Acessórios necessários: 2 tubos 16 mm DE (REF 91680) ou 2 tubos 24 mm DE (REF 936101)

- 1 Enxágue o tubo várias vezes com a amostra (o valor de pH da amostra deve estar entre pH 1 e 11)

Branco

- 2 Encher o tubo de ensaio com 5 mL de amostra
3 Limpar o tubo de teste
4 Colocar o tubo teste no fotômetro, como valor em branco e ajuste para zero

Amostra:

- 5 Coloque o conteúdo um Powder Pillow em outro tubo
6 Adicione 5 mL de amostra
7 Feche o tubo e agite
8 Limpe o tubo
9 Aguardar 10 min
10 Medir

Medição:

Consulte o manual de todos os fotômetros MACHEREY-NAGEL.

Após o uso, enxágue bem os tubos de ensaio e feche-os.

Este método é adequado para análise de água do mar.

Interferências:

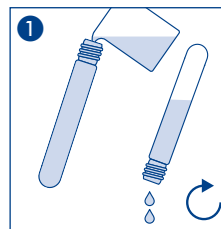
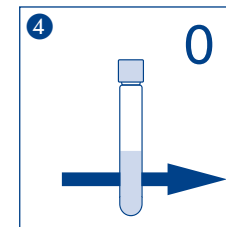
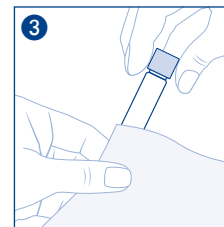
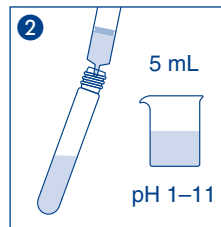
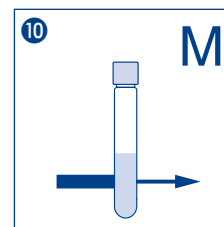
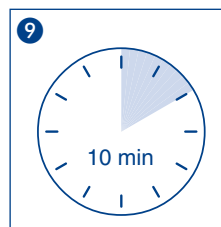
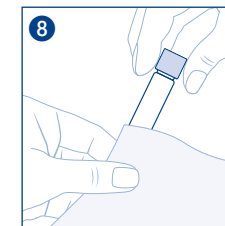
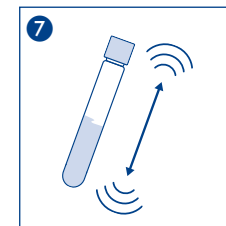
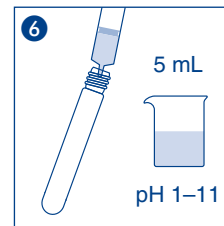
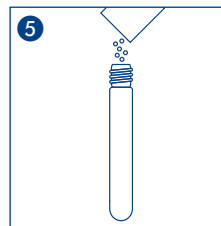
A temperatura da amostra de água deve estar entre 20 °C e 30 °C.

As seguintes quantidades de íons não interferirão:

< 50 mg/L $\text{Fe}^{2+/3+}$; < 150 mg/L Zn^{2+} ; < 250 mg/L Ca^{2+} ; 500 mg/L CO_3^{2-} ; < 500 mg/L NO_3^- ; < 2000 mg/L Cl^-

Descartes de amostras:

Informações sobre o descarte podem ser encontradas na FISPQ. Você pode baixar a FISPQ em www.mn-net.com/SDS.

**Branco (opcional):****Amostra:**

MACHEREY-NAGEL GmbH & Co. KG · Valencienner Str. 11 · 52355 Düren · Alemanha
Tel.: +49 24 21 969-0 · info@mn-net.com · www.mn-net.com