

## Amaranth method—Low range 20–500 µg/L

**HPT240**

Scope and application: For water and drinking water.



### Test preparation

#### Reagent storage

Storage temperature: 15–25 °C (59–77 °F)

#### Items to collect

| Description                                                                      | Quantity |
|----------------------------------------------------------------------------------|----------|
| 25 mL volumetric plastic flask and 1 mL syringe with scale and 1 needle (HCS140) | 2        |
| Sample Cell 10 mL, with stopper (24276-06)                                       | 2        |

#### Before starting

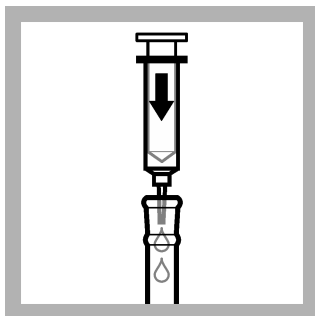
For best accuracy, it is recommended to use a precision pipette for dispensing the reagent.

Review safety information and expiration date on the package.

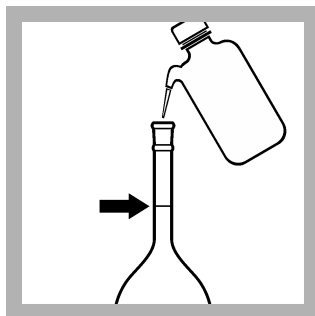
Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

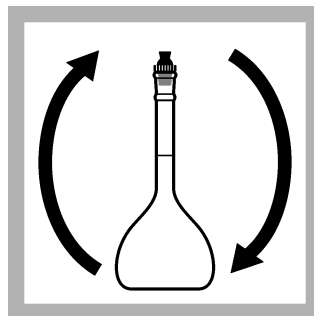
#### Procedure



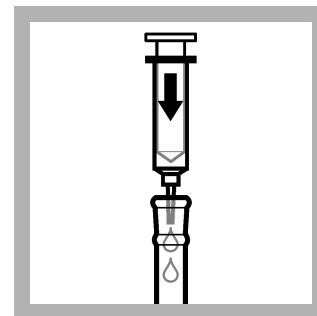
**1. Blank preparation:**  
Using the syringe, transfer **1.0 mL of Reagent A** into a 25-mL volumetric flask.



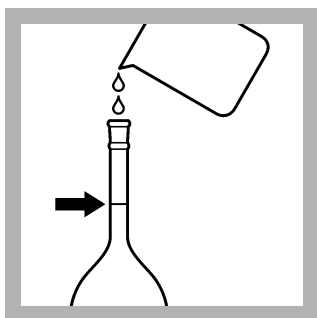
**2. Fill the first volumetric flask to the mark with deionized water.**



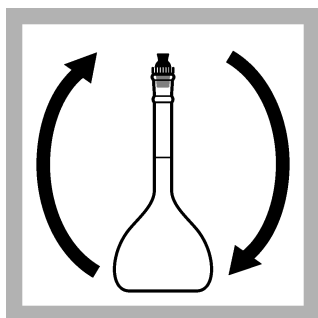
**3. Cap and invert the flask a few times.**



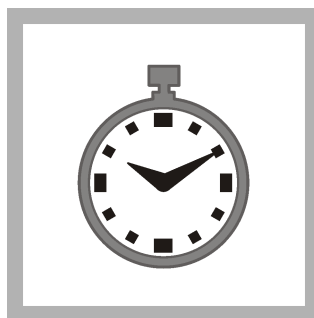
**4. Sample preparation:**  
Using the syringe, transfer **1.0 mL of Reagent A** into a second 25-mL volumetric flask.



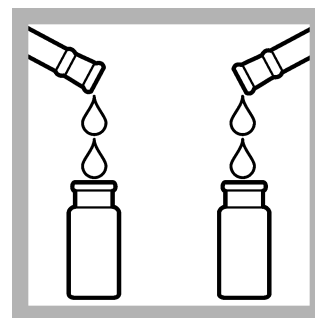
5. Fill the **second** volumetric flask to the mark with **sample**.



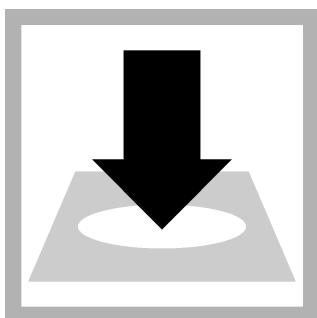
6. Cap and invert the flask a few times.



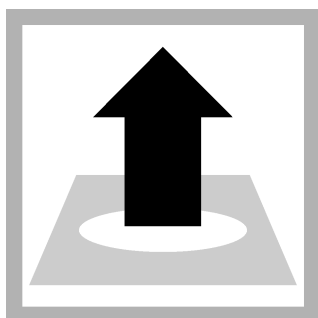
7. Start the reaction timer for **1 minute**.



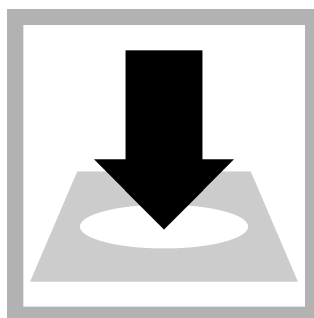
8. Pour **10 mL** of each volumetric flask into **2 different** 10-mL cuvettes (**blank** and **prepared sample**).



9. Insert the **blank** into the cell holder.  
Go to **Stored Programs**.  
Select the test (78), push **ZERO**.



10. Remove the blank.



11. Insert the **prepared sample** into the cell holder.  
Push **READ**.

## Interferences

The following compounds do not interfere:

| Interference level | Compound            |
|--------------------|---------------------|
| 2.0 mg/L           | $\text{ClO}_2^-$    |
| 2.0 mg/L           | $\text{ClO}_3^-$    |
| 2.0 mg/L           | $\text{ClO}^-$      |
| 1.0 mg/L           | $\text{Cu}^{2+}$    |
| 0.5 mg/L           | $\text{Fe}^{3+}$    |
| 0.2 mg/L           | $\text{CrO}_4^{2-}$ |



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