Colorimeter Series

Turbidity 400

Range(s): 10-400 FAU



Procedure

Note: Glassware that is scratched or damaged may affect test results. Use glassware that contains no visible scratching or etching.

- 1. Turn on the Colorimeter.
- 2. Select a test menu (ALL TESTS, RECENT TESTS, or FAVORITES) containing Turbidity 400 using ◀▶.
- Select Turbidity 400 using ▲▼; then press ENTER ○.
- 4. Rinse and fill 25 mm sample cell to 10 mL mark with DI water (R-0833) or turbidity-free water; then cap. (This will be the blank sample cell.)
- Insert blank sample cell into sample cell compartment.
 Align marks per User's Manual.

- 6. Select ZERO using **◄▶**; then press ENTER **⑤**. Zero will be displayed.
- Remove blank sample cell from sample cell compartment.
- Rinse and fill a second 25 mm sample cell to 10 mL mark with sample; then cap.
- Insert sample cell into sample cell compartment. Align marks per User's Manual.
- Select READ using ◀▶; then press ENTER ②. The instrument will read the sample and the result will be displayed.

Note: To check the accuracy of the test, a 160 FAU standard can be prepared. Using the 1 mL syringe (#6250), add 1.0 mL Turbidity 400 - Reagent A (R-8036A) into a 25 mL volumetric flask (#4009). Dilute to volume with DI water (R-0833). The standard should be prepared on a daily or as-needed basis. To adjust the calibration curve based on the reading of the 160 FAU standard, refer to "Adjust Calibration" section of User's Manual.

Interferences

Bubbles – positive interference

Color (particularly shades of red) – positive interference To remove interference: Filter a portion of sample water prior to testing and use in place of blank sample cell. Temperature – positive/negative interference

Samples should be measured immediately after collection in order to eliminate changes in turbidity as a result of the increase or decrease of sample temperature.

Test Method

Turbidity (Absorptometric)

Turbidity is determined by measuring the absorption of light by particles present in a sample. Calibration of this test was achieved using formazin turbidity standards. Methodology of this test requires results to be displayed as formazin attenuation units (FAU) and therefore is not applicable for reporting purposes.

For the purposes of this test, 1 NTU = 1 FTU = 1 FAU

(over)

Instruction #5533

Estimated Detection Limit

10 FAU

Precision

Using two lots of a formazin standard of 200 ppm FAU, an individual analyst obtained a standard deviation with the instrument of \pm 10 FAU.

Application

Industrial Water

Ordering Info

Reagent Pack

K-8036 Turbidity 400

Formulated for exclusive use with Taylor's TTi® Colorimeter.

Reagent Pack Components

R-0833	DI Water
R-8036A	Turbidity 400 - Reagent A
#4009	Volumetric Flask, 25 mL, glass
#6249	Filter Disc Holder, 25 mm, Millipore™
#6250	Syringe, 1 mL, plastic
#6260	Syringe, 30 mL, plastic
#6261	Filter Discs, 25 mm diameter, 0.45 μ m, Millipore TM , 100/box

