

STORM DRAIN KIT

MODEL SSDK • CODE 7446

This portable field kit was specifically designed and manufactured to meet the U.S. EPA requirements specified in Federal Register, November 16, 1990 Vol. 55 No. 217. Read this and all other accessory instructions before use to familiarize yourself with the test procedures. Be sure to read all MSDS sheets and safety instructions prior to use.

***WARNING:** Reagents marked with an * are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents see MSDS CD or our web site. To obtain a printed copy, contact us by e-mail, phone or fax.

To order individual reagents or test kit components, use the specified code number.

MISCELLANEOUS ACCESSORIES

QTY.	CONTENTS	CODE
1	Beaker, plastic 250 mL,	0609
1	Graduated Cylinder, 10 mL, plastic	2-2296
1	Octa-Slide Viewer	1100
1	Test Tube Brush	0514

USE OF THE OCTA-SLIDE VIEWER

The Octa-Slide Viewer (1100) should be held so non-direct light enters through the back of the comparator. With sample tube inserted at top, slide the Octa-Slide bar through the viewer and match with color standards.

GLASSWARE CLEANING PROCEDURE

It is important to rinse test tubes with Deionized Water, three times in succession, after each test procedure is completed. At the end of each day, all sampling and test glassware should be brushed with the test tube brush (0514) and detergent and rinsed three times in succession with Deionized Water. This procedure can best be performed in your laboratory.

To avoid possible detergent test interference, do not use detergent to clean Detergent Bottle (0800), rinse three times in succession with Deionized Water only.

TOTAL RESIDUAL CHLORINE

METHOD - DPD
ACCURACY ±10%

QTY.	CONTENTS	CODE
100	*Chlorine DPD #4R Tablet	*6899-J
2	Test Tubes, plastic, w/caps	0106
1	Chlorine Octa-Slide Bar, 0.2-3.0 ppm	3401

PROCEDURE

1. Fill test tube (0106) to 5 mL line with water sample.
2. Add one *Chlorine DPD #4R Tablet (6899). Cap and shake until dissolved.
3. Insert test tube into Octa-Slide Viewer (1100). Match color with a standard on the Chlorine Octa-Slide Bar (3401). Record as ppm Total Residual Chlorine.

PHENOLS

METHOD - AMINOANTIPYRINE
ACCURACY ±10%

QTY.	CONTENTS	CODE
10 g	Aminoantipyrine Reagent	7825-D
60 mL	*Ammonium Hydroxide Solution	*7826-H
2 x 100 mL	*Potassium Ferricyanide Solution	*7827-J
1	Spoon, 0.1 g	0699
1	Pipet, plain, glass, w/cap	0344
1	Pipet Assembly, 1.0 mL, plastic, w/cap	0330
2	Test Tubes, plastic, w/caps	0106
1	Phenols Octa-Slide Bar, 0-5 ppm	3434
1	Sample Reaction Tube	0837

PROCEDURE

1. Fill Sample Reaction Tube (0837) to line with sample water.
2. Use 0.1 g spoon (0699) to add 1 measure of Aminoantipyrine Reagent (7825). Cap and mix.
3. Use the unmarked pipet (0344) to add 4 drops of *Ammonium Hydroxide Solution (7826). Cap and mix.
4. Use the 1.0 mL pipet (0330) to add 2 mL (2 measures) of *Potassium Ferricyanide Solution (7827). Cap and mix. Solution will turn orange/pink if phenols are present.
5. Fill test tube (0106) to 10 mL line with solution. Insert test tube into Octa-Slide Viewer (1100). Match sample color to a color standard on Phenols Octa-Slide Bar (3434). Record as ppm Phenols.

TOTAL COPPER

METHOD - DIETHYLDITHIOCARBAMATE
ACCURACY ±10%

QTY.	CONTENTS	CODE
30 mL	*Copper 1	*6446-G
2	Test Tubes, plastic, w/caps	0106
1	Copper Octa-Slide Bar, 0-4.0 ppm	3435

PROCEDURE

1. Fill two test tubes (0106) to 10 mL line with sample water.
2. Add 5 drops of *Copper 1 (6446) to one test tube. Cap and invert to mix. If more yellow than second test tube, copper is present.
3. Insert each test tube into Octa-Slide Viewer (1100). Match color with a standard in Copper Octa-Slide Bar (3435).
4. Subtract the unreacted sample result from the reacted sample result. Record result as ppm Copper.

DETERGENTS

METHOD - SOLVENT EXTRACTION/
BROMPHENOL BLUE INDICATOR
ACCURACY ±0.1 ppm

QTY.	CONTENTS	CODE
60 g	*Detergent Reagent #1	*7444-H
3 x 100 mL	*Detergent Reagent #2	*6037-J
100 mL	*Detergent Reagent #3	*7445-J
1	Pipet, 0.5 mL, glass, w/cap	0335
1	Spoon, 1.0 g	0697
1	Bottle, French, Calibrated to 65 & 75 mL	0800

PROCEDURE

1. Fill Bottle (0800) to 65 mL line with sample water.
2. Use the 1.0 g spoon (0697) to add 2 measures of *Detergent Reagent #1 (7444). Shake until dissolved.
3. Fill to 75 mL line with Detergent Reagent #2 (6037).
4. Use pipet (0335) to add 0.5 mL Detergent Reagent #3 (7445). Shake vigorously for 15 seconds. Wait until layers separate (20-30 seconds). If the top layer is light blue, less than 0.1 ppm detergent is present and no further testing is necessary. If the top layer is colorless, continue adding Detergent Reagent #3 (7445), 0.5 mL at a time, shaking vigorously for 15 seconds after each addition, allowing the layers to separate until the top layer is light blue. Count the number of additions of 0.5 mL additions of Detergent Reagent #3 (7445) required to change the top layer in the Bottle from colorless to light blue.
5. Detergent concentrations in ppm = $[(\# \text{ of pipetsful (0.5 mL) Detergent Reagent \#3 (7445) needed in Step 4) - 1}] \times 0.1$.
EXAMPLE: It takes 9 x 0.5 mL pipetsful to turn top layer light blue. The amount of detergent present is <0.7 ppm but >0.8 ppm.

pH ELECTRONIC POCKETESTER

METHOD - ELECTROMETRIC
ACCURACY ±0.2 pH UNITS

PROCEDURE:

See separate instruction sheet.

TURBIDITY

METHOD - VISUAL

QTY.	CONTENTS	CODE
2	Test Tubes, w/caps	0107
1	Turbidity Octa-Slide Bar, Low-Med-High	3436

PROCEDURE

1. Fill one (0107) test tube to the 10 mL line with sample water.
2. Insert tube (with black lines to the rear) into Octa-Slide Viewer (1100). Insert Turbidity Standard Slide Bar (3436) into Octa-Slide Viewer. Compare the degree to which the black lines are obscured by the turbidity of sample. Disregard any differences in color between the sample and the standards; test is based on turbidity, not color.
3. Record results as Low-Medium-High.

NOTE: The standards were produced by comparing Formazin Turbidity standards and matching appropriate chips. The results may be expressed as a range of turbidity in FTU's.

LOW	MEDIUM	HIGH
0-50 FTU's	75-150 FTU's	200-500 FTU's