

PHENOL

AMINOANTIPYRIN METHOD • CODE 3652-SC

QUANTITY	CONTENTS	CODE
5 g	Aminoantipyrine Reagent	7825-C
30 mL	*Ammonium Hydroxide Solution	*7826-G
2 x 60 mL	*Potassium Ferricyanide Solution	*7827-H
1	Spoon, 0.1 g, plastic	0699
1	Pipet, plain, plastic	0352
1	Pipet, 1.0 mL, plastic	0354

*WARNING: Reagents marked with an * are considered hazardous substances. 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.

Phenols may occur in domestic and industrial waste waters and in drinking water supplies. Chlorination of waters containing phenols may produce odiferous and objectionable tasting chlorophenols. Natural waters seldom contain more than 1 mg/L phenol.

APPLICATION: Drinking and surface waters; domestic and industrial waste water.

RANGE: 0.00–6.00 ppm Phenol

METHOD: 4-Aminoantipyrine is oxidized in the presence of all ortho- and meta- substituted phenols to form a colored complex in proportion to the amount of phenol present.

SAMPLE HANDLING & PRESERVATION: Phenols are subject to biological and chemical oxidation. Samples should be analyzed within 4 hours after collection. If sample cannot be analyzed within 4 hours, it can be preserved by acidification with phosphoric acid to pH 4.0.

INTERFERENCES: Oxidizing and reducing chemicals, alkaline pH values, and phenol decomposing bacteria may interfere with the test.

PROCEDURE

Use universal sample holder

1. Press and hold **ON** button until spectrophotometer turns on.
2. Scroll to and select PROGRAMMED TESTS.
3. Scroll to and select ALL TESTS (or another sequence containing 77 Phenol) from TESTING MENU.
4. Scroll to and select 77 Phenol from menu.
5. Rinse a clean tube (0290) with sample water. Fill to the 10 mL line with sample.
6. Insert tube into chamber, close lid and select SCAN BLANK.
7. Remove tube from Spectro. Use the 0.1 g spoon (0699) to add one measure of Aminoantipyrine Reagent (7825-C) to add 4 drops of *Ammonium Hydroxide Solution (7826). Cap and mix.
8. Use the plain pipet (0352) to add 4 drops of *Ammonium Hydroxide Solution (7826). Cap and mix.
9. Use the 1 mL pipet (0354) to add 2 mL of *Potassium Ferricyanide Solution (7827). Cap and mix. Solution will almost immediately develop a reddish hue if phenols are present.
10. Insert tube into chamber, close lid and select SCAN SAMPLE. Record result.
11. Press **OFF** button to turn spectrophotometer off or press **EXIT** button to exit to a previous menu or make another menu selection.