

CHAPTER FIVE

MISCELLANEOUS TEST METHODS

Prior to employing the methods in this chapter, analysts are advised to consult the disclaimer statement at the front of this manual and the information in Chapter Two for guidance on the allowed flexibility in the choice of apparatus, reagents, and supplies. In addition, unless specified in a regulation, the use of SW-846 methods is not mandatory in response to Federal testing requirements. The information contained in each procedure is provided by EPA as guidance to be used by the analyst and the regulated community in making judgments necessary to meet the data quality objectives or needs for the intended use of the data.

The following methods are found in Chapter Five:

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| Method 5050: | Bomb Preparation Method for Solid Waste |
| Method 9000: | Determination of Water in Waste Materials by Karl Fischer Titration |
| Method 9001: | Determination of Water in Waste Materials by Quantitative Calcium Hydride Reaction |
| Method 9010C: | Total and Amenable Cyanide: Distillation |
| Method 9012B: | Total and Amenable Cyanide (Automated Colorimetric, with Off-line Distillation) |
| Method 9013A: | Cyanide Extraction Procedure for Solids and Oils |
| Method 9014: | Titrimetric and Manual Spectrophotometric Determinative Methods for Cyanide |
| Method 9015: | Metal Cyanide Complexes by Anion Exchange Chromatography and UV Detection |
| Method 9016: | Free Cyanide in Water, Soils and Solid Wastes by Microdiffusion |
| Method 9020B: | Total Organic Halides (TOX) |
| Method 9021: | Purgeable Organic Halides (POX) |
| Method 9022: | Total Organic Halides (TOX) by Neutron Activation Analysis |
| Method 9023: | Extractable Organic Halides (EOX) in Solids |
| Method 9030B: | Acid-Soluble and Acid-Insoluble Sulfides: Distillation |
| Method 9031: | Extractable Sulfides |
| Method 9034: | Titrimetric Procedure for Acid-Soluble and Acid-Insoluble Sulfides |
| Method 9035: | Sulfate (Colorimetric, Automated, Chloranilate) |
| Method 9036: | Sulfate (Colorimetric, Automated, Methylthymol Blue, AA II) |
| Method 9038: | Sulfate (Turbidimetric) |
| Method 9056A: | Determination of Inorganic Anions by Ion Chromatography |
| Method 9057: | Determination of Chloride from HCl/Cl ₂ Emission Sampling Train (Methods 0050 and 0051) by Anion Chromatography |
| Method 9060A: | Total Organic Carbon |
| Method 9065: | Phenolics (Spectrophotometric, Manual 4-AAP with Distillation) |
| Method 9066: | Phenolics (Colorimetric, Automated 4-AAP with Distillation) |
| Method 9067: | Phenolics (Spectrophotometric, MBTH with Distillation) |

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| Method 9070A: | <i>n</i> -Hexane Extractable Material (HEM) for Aqueous Samples |
| Method 9071B: | <i>n</i> -Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples |
| Method 9075: | Test Method for Total Chlorine in New and Used Petroleum Products by X-Ray Fluorescence Spectrometry (XRF) |
| Method 9076: | Test Method for Total Chlorine in New and Used Petroleum Products by Oxidative Combustion and Microcoulometry |
| Method 9077: | Test Methods for Total Chlorine in New and Used Petroleum Products (Field Test Kit Methods) |
| | Method A: Fixed End Point Test Kit Method |
| | Method B: Reverse Titration Quantitative End Point Test Kit Method |
| | Method C: Direct Titration Quantitative End Point Test Kit Method |
| Method 9131: | Total Coliform: Multiple Tube Fermentation Technique |
| Method 9132: | Total Coliform: Membrane-Filter Technique |
| Method 9210A: | Potentiometric Determination of Nitrate in Aqueous Samples with an Ion-Selective Electrode |
| Method 9211: | Potentiometric Determination of Bromide in Aqueous Samples with Ion-Selective Electrode |
| Method 9212: | Potentiometric Determination of Chloride in Aqueous Samples with Ion-Selective Electrode |
| Method 9213: | Potentiometric Determination of Cyanide in Aqueous Samples and Distillates with Ion-Selective Electrode |
| Method 9214: | Potentiometric Determination of Fluoride in Aqueous Samples with Ion-Selective Electrode |
| Method 9215: | Potentiometric Determination of Sulfide in Aqueous Samples and Distillates with Ion-Selective Electrode |
| Method 9216: | Potentiometric Determination of Nitrate in Aqueous Samples with Ion-Selective Electrode |
| Method 9250: | Chloride (Colorimetric, Automated Ferricyanide AAI) |
| Method 9251: | Chloride (Colorimetric, Automated Ferricyanide AAI) |
| Method 9253: | Chloride (Titrimetric, Silver Nitrate) |
| Method 9320: | Radium-228 |

Appendix A: Changes in this version

1. The format was updated to Microsoft Word .docx.
2. Methods 9015 and 9016 were added. Method letter for 9014 was updated to A.
3. Revision number was changed to 6. The date published was updated to July 2014.