



Designation: D 3694 – 96

An American National Standard

Standard Practices for Preparation of Sample Containers and for Preservation of Organic Constituents¹

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1. Scope

1.1 These practices cover the various means of (1) preparing sample containers used for collection of waters to be analyzed for organic constituents and (2) preservation of such samples from the time of sample collection until the time of analysis.

1.2 The sample preservation practice is dependent upon the specific analysis to be conducted. See Section 9 for preservation practices listed with the corresponding applicable general and specific constituent test method. The preservation method for waterborne oils is given in Practice D 3325. Use of the information given herein will make it possible to choose the minimum number of sample preservation practices necessary to ensure the integrity of a sample designated for multiple analysis. For further considerations of sample preservation, see the *Manual on Water*.²

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.* For specific hazard statements, see 6.7, 6.24, and 8.1.3.

2. Referenced Documents

2.1 ASTM Standards:

- D 1129 Terminology Relating to Water³
- D 1193 Specification for Reagent Water³
- D 1252 Test Methods for Chemical Oxygen Demand (Dichromate Oxygen Demand) of Water⁴
- D 1783 Test Methods for Phenolic Compounds in Water⁴
- D 2036 Test Methods for Cyanides in Water⁴
- D 2330 Test Method for Methylene Blue Active Substances⁴
- D 2579 Test Methods for Total and Organic Carbon in Water⁴

D 2580 Test Method for Phenols in Water by Gas-Liquid Chromatography⁴

D 2908 Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography⁴

D 3113 Test Methods for Sodium Salts of EDTA in Water⁴

D 3325 Practice for Preservation of Waterborne Oil Samples⁴

D 3371 Test Method for Nitriles in Aqueous Solution by Gas-Liquid Chromatography⁴

D 3534 Test Method for Polychlorinated Biphenyls (PCBs) in Water⁴

D 3590 Test Methods for Total Kjeldahl Nitrogen in Water⁴

D 3695 Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography⁴

D 3871 Test Method for Purgeable Organic Compounds in Water Using Headspace Sampling⁴

D 3921 Test Method for Oil and Grease and Petroleum Hydrocarbons in Water⁴

D 3973 Test Method for Low-Molecular Weight Halogenated Hydrocarbons in Water⁴

D 4129 Test Method for Total and Organic Carbon in Water by High-Temperature Oxidation and Coulometric Detection⁴

D 4165 Test Method for Cyanogen Chloride in Water⁴

D 4193 Test Method for Thiocyanate in Water⁴

D 4281 Test Method for Oil and Grease (Fluorocarbon Extractable Substances) by Gravimetric Determination⁴

D 4282 Test Method for Determination of Free Cyanide in Water and Wastewater by Microdiffusion⁴

D 4374 Test Methods for Cyanide in Water—Automated Methods for Total Cyanide, Dissociable Cyanide, and Thiocyanate⁴

D 4515 Practice for Estimation of Holding Time for Water Samples Containing Organic Constituents⁴

D 4657 Test Method for Polynuclear Aromatic Hydrocarbons in Water⁴

D 4744 Test Method for Organic Halides in Water by Carbon Adsorption Microcoulometric Detection⁴

D 4763 Practice for Identification of Chemicals in Water by Fluorescence Spectroscopy⁴

¹ These practices are under the jurisdiction of ASTM Committee D-19 on Water and are the direct responsibilities of Subcommittee D19.06 on Methods for Analysis for Organic Substances in Water.

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² *Manual on Water*, ASTM STP 442, ASTM, 1969.

³ *Annual Book of ASTM Standards*, Vol 11.01.

⁴ *Annual Book of ASTM Standards*, Vol 11.02.