



Designation: D 4165 – 9500

Standard Test Method for Cyanogen Chloride in Water ¹

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1. Scope

1.1 This test method covers the determination of cyanogen chloride in water. Cyanogen chloride is normally present only at very low concentrations; it is a very labile and sparsely soluble gaseous compound. Water samples may contain cyanogen chloride after the chlorination of waste waters containing cyanide or thiocyanate compounds.

1.2 Cyanogen chloride is unstable. A quick test using a spot plate or comparator as soon as the sample is collected may be the best test, reducing the loss of cyanogen chloride during the time lapse between sampling and analysis. (See Fig. 1 for a typical decay curve for cyanogen chloride in a solution.)

1.3 This test method has been used successfully with reagent water. The analyst is responsible for determining whether the test method is applicable to the water matrix being tested. Reference is made to Test Method D of Test Methods D 2036 which is based on similar chemical reactions and has been evaluated by collaborative testing in this matrix.

1.4 The lower limit of detectability is 0.005 mg CN⁻/L.

1.5 *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.* Specific hazard statements are given in Note 1 and Note 2 and Section 9.

2. Referenced Documents

2.1 ASTM Standards:

¹ This test method is under the jurisdiction of ASTM Committee D-19 on Water and is the direct responsibility of Subcommittee D19.06 on Methods for Analysis for Organic Substances in Water.

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