



Designation: D 1291 – 89 (Reapproved 1994)^{€1} 1291 – 01

Standard Practice for Estimation of Chlorine Requirement or Demand of Water, or Both¹

This standard is issued under the fixed designation D 1291; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (€) indicates an editorial change since the last revision or reapproval.

^{€1} NOTE — Section 12, Keywords, was added editorially in April 1994.

1. Scope

1.1 This practice provides a means of estimating the quantity of chlorine required to be added to a unit volume of water to accomplish a predetermined treatment objective or to completely react with all chlorine reactable substances in the water, or both.

1.2 Temperature, pH, and initial chlorine dosage are all variables in estimating the optimum chlorination practice. The effects of these variables can be evaluated using this practice.

1.3 Chlorine residual is determined using Test Method D 1253.

1.4 This practice is applicable to all types of water in which the stated treatment objective can be evaluated or residual chlorine can be measured, or both.

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.* For a specific hazard statement, see Note 1.

2. Referenced Documents

2.1 ASTM Standards:

¹ This practice is under the jurisdiction of ASTM Committee D-19 on Water and is the direct responsibility of Subcommittee D19.11 D19.03 on Sampling of Water for Power Generation and Process Use—Water-Formed Deposits, Surveillance of Water, and Flow Measurement of Water.

Current edition approved Oct. 27, 1989; June 10, 2001. Published December 1989; July 2001. Originally published as D 1291 – 53T. Last previous edition D 1291 – 89 (1994)^{€1}.