



# Standard Specification for Liquid Chlorine<sup>1</sup>

This standard is issued under the fixed designation E 1120; 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 (ε) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers industrial grade chlorine normally available as a liquid in pressurized metal containers.

## 2. Referenced Documents

### 2.1 ASTM Standards:

E 410 Test Method for Moisture and Residue in Liquid Chlorine<sup>2</sup>

E 1746 Test Method for Sampling and Analysis of Liquid Chlorine for Gaseous Impurities<sup>2</sup>

### 2.2 Federal Documents:

Federal Specification PPP-C-2020, Chemicals, Liquid, Dry, and Paste, Packaging of<sup>3</sup>

Title 49 CFR, Department of Transportation, Parts 100 to 199<sup>4</sup>

Title 40 CFR, Protection of the Environment, Parts 162 to 180<sup>4</sup>

Title 29 CFR, Labor, Part 1910.1200, New Requirements as to Container Labeling, Occupational Safety and Health Administration (OSHA)<sup>4</sup>

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee E-15 on Industrial Chemicals and is the direct responsibility of Subcommittee E15.77 on Specifications for Liquid Chlorine.

Current edition approved July 10, 1997. Published June 1998. Originally published as E 1120 – 86. Last previous edition E 1120 – 86 (1996).

<sup>2</sup> Annual Book of ASTM Standards, Vol 15.05.

<sup>3</sup> Single copies of Federal Specifications required for bidding purposes are available from General Services Administration Business Service Centers in Boston, New York, Washington, DC, Philadelphia, Atlanta, Chicago, Kansas City, MO, Fort Worth, Houston, San Francisco, Los Angeles, and Seattle, WA.

<sup>4</sup> The Code of Federal Regulations may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

*The American Society for Testing and Materials takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.*

*This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.*

*This standard is copyrighted by ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (http://www.astm.org).*

## 3. Chemical Requirements

3.1 Liquid chlorine shall conform to the following requirements:

		ASTM Method
Gaseous impurities, % by vol	0.5 max	E 1746
Moisture, % by weight	0.015 max	E 410
Nonvolatile material, % by weight	0.015 max	E 410

## 4. Sampling

4.1 Sample liquid chlorine in accordance with the appropriate sections of Test Method E 412.

## 5. Packaging and Package Marking

5.1 Package and label industrial and commercial quantities in accordance with Department of Transportation CFR Title 49 Part 100 to 199, and state and local regulations.

5.2 When specified, Department of Defense Procurements shall be packaged and labeled in accordance with the applicable paragraphs of Federal Specification PPP-C-2020.

5.3 Label chlorine to be used as a pesticide in accordance with the applicable regulations of the Environmental Protection Agency as described in CFR Title 40, Parts 162 to 180.

5.4 Labeling also must comply with OSHA regulations described in CFR Title 29 Part 1910 and Section 1910.1200 as published in 48 Federal Register 53280.

## 6. Keywords

6.1 chlorine; liquid