



**CGA P-47—2014**  
**GUIDELINES FOR FTSC CODES**  
**AND CURRENT GAS LISTINGS**

**SECOND EDITION**

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Work Item 18-030  
Specialty Gases Committee

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NOTE—Technical changes from the previous edition are underlined.

NOTE—Appendix A (Informative) is for information only.

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## 1 Scope

The scope of this publication is to provide a consolidated listing of fire potential, toxicity, state of gas, and corrosiveness (FTSC) numerical codes established by the Compressed Gas Association (CGA). These FTSC codes are established for pure product. The FTSC numerical code shall be determined using Table 1. The process for submission, creation, and approval of new FTSC codes and the review of existing FTSC codes are included in this publication.

## 2 Purpose

The FTSC code is a convenient tool to identify properties of a specific gas characterizing the four previously mentioned categories. The purpose of this publication is to establish a consolidated listing of FTSC codes, which can be used and referenced by other publications. These FTSC codes were formerly found in CGA S-1.1, *Pressure Relief Device Standards—Part 1—Cylinders for Compressed Gases*; CGA S-7, *Standard Method for Selecting Pressure Relief Devices for Compressed Gas Mixtures in Cylinders*; and CGA V-7, *Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures* [1, 2, 3].<sup>1</sup> This will help to avoid duplication and inconsistency in information used in other publications referencing FTSC codes.

## 3 FTSC code classification

Each gas is classified with an FTSC numerical code based on these properties fire potential, toxicity, state of gas, and corrosiveness from which initials FTSC are derived.

A numerical scale is used to assign a characteristic within each of the four property categories as shown in Table 1 and these numbers produce the four-digit FTSC code for each gas shown in Table 2.

The FTSC code thus established identifies the gas by its properties and allows similar gases to be grouped under the same FTSC code.

## 4 Process for requesting new FTSC code or review of existing FTSC code

The process for requesting the creation of a new FTSC code for a pure product or the review of an existing FTSC code shall include the following steps:

- a) A request form, located in Appendix A, is to be completed and sent to the CGA Specialty Gases Committee Administrator;  
  
NOTE—The request should contain supporting background information.
- b) The CGA Specialty Gases Committee Administrator will send the request to the FTSC Code Task Force Chair, task force members, and Specialty Gases Committee Chair;
- c) Simultaneously, the request will be added to the upcoming Specialty Gases Committee meeting agenda under work item 00-82 and the FTSC Code Task Force may meet to discuss the request to assign or revise the FTSC code;
- d) At the following Specialty Gases Committee meeting, the FTSC Code Task Force Chair will present the result of the meeting on the FTSC code request. The Specialty Gases Committee will approve or take additional actions on the request;
- e) The FTSC Code Task Force Chair will submit a proposed change to this publication to reflect the approval of the new FTSC code or modification of an existing FTSC code; and
- f) If necessary, as part of the approval of the request, a Safety Alert may be published for notification of the change.

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<sup>1</sup> References are shown by bracketed numbers are listed in order of appearance in the reference section.