



# Standard Specification for Warnings on Refillable CO<sub>2</sub> Cylinders Used In the Sport of Paintball<sup>1</sup>

This standard is issued under the fixed designation F 2553; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers warnings used on refillable CO<sub>2</sub> cylinders with a threaded interface used in the sport of paintball.

1.2 *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.*

## 2. Significance and Use

2.1 This specification specifies the minimum warnings and instructions that are to be provided on the CO<sub>2</sub> cylinder itself.

## 3. Conformance

3.1 Paintball CO<sub>2</sub> cylinders shall not, either by label or other means, indicate conformance with this specification unless, at the time of manufacture, they conform with all applicable requirements contained herein.

## 4. Product Marking

4.1 Refillable CO<sub>2</sub> cylinders used in the sport of paintball shall be prominently and durably marked to convey the following cautionary statement:

4.1.1 A signal word such as “WARNING” or “DANGER”.

4.1.2 A warning that the cylinder can fly off with enough force to kill if the valve unscrews from the cylinder.

4.1.3 Instructions to look at valve when removing the cylinder.

4.1.4 Instructions to stop if valve starts to unscrew from the cylinder.

4.1.5 Instructions to screw it back on and immediately contact the manufacturer for instructions for repair if the valve does start to unscrew from the cylinder.

4.1.6 A warning that the cylinder is an explosion hazard.

4.1.7 Notice that improper use, filling, storage or disposal may result in property damage, serious personal injury, or death.

4.1.8 Notice that the cylinder must be filled only by properly trained personnel in accordance with CGA Pamphlets P-1, C-6, G-6.8, and AV-7.<sup>2</sup>

4.1.9 Notice that valves must be installed and removed only by trained personnel.

4.1.10 Instructions to not exceed the cylinder’s marked CO<sub>2</sub> capacity.

4.1.11 Notice to not expose to temperatures exceeding 130°F when pressurized.

4.1.12 Notice to not use caustic cleaners or strippers.

4.1.13 Instructions to not modify or valve the cylinder in any way.

4.1.14 Notice to not remove or cover the label.

4.1.15 Notice that the cylinder must be destroyed if exposed to fire or heated to a temperature exceeding 350°F.

4.1.16 Notice to keep cylinder out of reach of children without proper supervision.

4.2 Markings must include the maximum CO<sub>2</sub> capacity of the cylinder in a prominent manner.

4.3 Markings must indicate the manufacturer or distributor or retailer of the cylinder or completed cylinder assembly and contact information for this entity.

4.4 Markings must include a graphic similar to that shown in Fig. 1.

4.5 An example of an acceptable label for a 20 oz capacity CO<sub>2</sub> cylinder is noted in Fig. 2. This sample does not include information in 4.3 as required.

4.6 The warnings, instructions, and notices may be a combination of upper and lower case letters and must be of a size not less than 8-point type. The letters in the signal word shall be at least 50 % larger than the letters in other words in the cautionary statement. The signal word shall be in sans serif letters in upper case only and preceded by a safety alert symbol. It is composed of an equilateral triangle surrounding an exclamation point. The base of the safety alert symbol shall be on the same horizontal line as the base of the letters of the signal word. The height of the safety alert symbol shall equal or exceed the signal word height. All words and symbols must contrast with the background color.

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F08 on Sports Equipment and Facilities and is the direct responsibility of Subcommittee F08.24 on Paintball and Equipment.

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<sup>2</sup> Available from the Compressed Gas Association, 4221 Walney Road, 5<sup>th</sup> Floor, Chantilly, Virginia 20151-2923.