time of testing shall be between 68 °F. and 86 °F. Hold a burning paraffin candle whose diameter is at least 1 inch, so that the flame is in contact with the surface of the sample at the end of the major axis for 5 seconds or until the sample ignites, whichever is less. Remove the candle. By means of a stopwatch, determine the time of combustion with self-sustained flame. Do not exceed 60 seconds. Extinguish flame with a CO_2 or similar nondestructive type extinguisher. Measure the dimensions of the burnt area and calculate the rate of burning along the major axis of the sample.

§ 1500.45 Method for determining extremely flammable and flammable contents of self-pressurized containers.

(a) *Equipment required.* The test equipment consists of a base 8 inches wide, 2 feet long, marked in 6-inch intervals. A rule 2 feet long and marked in inches is supported horizontally on the side of the base and about 6 inches above it. A paraffin candle 1 inch or more in diameter, and of such height that the top third of the flame is at the height of the horizontal rule, is placed at the zero point in the base.

(b) *Procedure.* The test is conducted in a draft-free area that can be ventilated and cleared after each test. Place the self-pressurized container at a distance of 6 inches from the flame source. Spray for periods of 15 seconds to 20 seconds (one observer noting the extension of the flame and the other operating the container) through the top third of the flame and at a right angle to the flame. The height of the flame should be approximately 2 inches. Take three readings for each test, and average. As a precaution do not spray large quantities in a small, confined space. Free space of previously discharged material.

§ 1500.46 Method for determining flashpoint of extremely flammable contents of self-pressurized containers.

Use the apparatus described in § 1500.43a. Use some means such as dry ice in an open container to chill the pressurized container. Chill the container, the flash cup, and the bath solution of the apparatus (brine or glycol may be used) to a temperature of about 25 °F below zero. Puncture the chilled container to exhaust the propellant. Transfer the chilled formulation to the test apparatus and test in accordance with the method described in § 1500.43a.

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§ 1500.47 Method for determining the sound pressure level produced by toy caps.

(a) *Equipment required.* The equipment for the test includes a microphone, a preamplifier (if required), and an oscilloscope.

(1) The microphone-preamplifier system shall have a free-field response uniform to within ±2 decibels from 50 hertz to 70 kilohertz or beyond and a dynamic range covering the interval 70 to 160 decibels relative to 20 micronewtons per square meters. Depending on the model, the microphone shall be used at normal or at grazing incidence, whichever gives the most uniform free-field response. The microphone shall be calibrated both before and after the test of a model of cap. The calibration shall be accurate to within ±1 decibel. If the calibration is of the pressure type or of the piston-phone plus electrostatic actuator type, it shall be corrected to free-field conditions in accordance with the manufacturer's instructions.

(2) The oscilloscope shall be the storage type or one equipped with a camera. It shall have a response uniform to within ±1 decibel from 50 hertz to 250 kilohertz or higher. It shall be calibrated to within ±1 decibel against an external voltage source periodically during the tests.

(b) *Procedure.* (1) Use the type pistol that would ordinarily be used with the caps being tested. Place the pistol and testing equipment so that neither the pistol nor the microphone is closer than 1 meter from any wall, floor, ceiling, or other large obstruction. Locate the pistol and the microphone in the same horizontal plane with a distance of 25 centimeters between the diaphragm of the microphone and the position of the explosive. Measure the peak sound pressure level at each of the six designated orientations of the pistol with respect to the measuring