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## Labeling of Hazardous Substances

### Sec. 19-301-1. Test methods for determining labeling of self-pressurized dispensers

The type of warning statement required on self-pressurized dispensers shall be determined by the performance of the contents of such dispensers when tested by Methods I, II and III outlined below. When by Method I a flame projection exceeding 18 inches is obtained with the valve open full, or flashback is obtained at any valve opening, the container shall be labeled: "Warning (or Caution)- Do not use near fire or flame." Materials yielding flash points below 80°F. by Method II shall be labeled "Warning (or Caution)-Flammable. Do not use near heat or flame." When Method III shows any significant propagation of flame through the vapor-air mixture in the open drum test, or any explosion or burning of the vapor-air mixture sufficiently rapid to cause the hinged cover to move in the closed drum test, the container shall be labeled: "Warning (or Caution)-Do not use near heat or flame."

(a) **Method I (Flame Projection Test).** (1) **Apparatus.** The apparatus consists of: (i) A base composed of a flat strip of wood or metal, four inches wide and two feet long, cross-ruled at six-inch intervals; (ii) a ruler thirty inches long, marked in inches, supported horizontally to one side of the base and about six inches above it; and (iii) a plumber's candle, of such height that the top third of its flame will be at the same level as the ruler, placed on the zero marking of the base. (2) **Procedure.** (This test requires two operators, one to manipulate the dispenser and the other to take readings. Tests should be conducted in an area that is draft-free and capable of ventilation after each test.) Light the candle. Let one observer hold the dispenser being tested in such a position that it is six inches from the candle flame, with its nozzle so pointed that any spray will pass at right angles through the top third of the flame and extend lengthwise of the base and ruler. This observer shall operate the spray device of the dispenser for fifteen to twenty seconds, while the other observer records the horizontal extension of the candle flame. The test shall be repeated two more times, and the three readings averaged.

(b) **Method II (Modified Tagliabue Open Cup Test).** (1) **Apparatus.** The apparatus consists of a standard Tagliabue open cup tester, a Tag gas flame testing burner, a flash test thermometer, and a heat source.

(2) **Procedure.** Place the container in an upright position and pierce its top with a fine-pointed instrument. In a few moments, when most of the gas has escaped, enlarge the hole. Finally, when there appears to be no further gas evolution, cut open the top of the container and let it stand until the temperature of the contents reaches 60°F. Then pour sufficient of the contents into the tester cup to fill it to the test line, immerse a thermometer in the liquid, and apply heat at the rate of 2°F. per minute. As the heating proceeds, apply the test flame at intervals until either a flame flashes completely across the top of the cup or the height of the liquid has dropped one-fourth inch below the test line. If flashing is obtained before the maximum permissible evaporation has taken place, record as the flash point the temperature of the liquid at which such flashing occurred.

(c) **Method III (Drum Test).** (1) **Apparatus.** The apparatus consists of a fifty-five gallon open-head drum which has been modified as follows: (i) A hinged cover, arranged so that it will open readily under a pressure of five pounds, is fitted over the open head, (ii) three circular openings, one inch in diameter, are bored through the base, about two inches from the edge, in such position that when the drum is on its side one hole will be at the top, one at the bottom, and one halfway down

one side; (iii) a shutter capable of being readily opened and closed is fitted over each of these holes; and (iv) a six-inch square opening is cut through the center of the base and securely covered with a piece of safety glass.

(2). **Procedure.** Lay the modified drum on its side out in the open, at a time when the temperature is between 60° and 80°F. Stand a plumber's candle (or similar flame source) inside the drum half way from each end. For the open drum test, proceed as follows: Fully open the hinged cover, close all three shutters, light the candle, direct a spray from the dispenser (valve fully open) for one minute into the upper half of the open end of the drum and above the candle flame, and watch for propagation of the flame through the vapor-air mixture away from the candle. For the closed drum test, proceed as follows: (i) Light the candle, drop the hinged cover down so that it rests free against the edge of the drum, open the top shutter on the other end, jet a spray from the container being tested (valve fully open) into the drum through this opening for one minute, and observe whether sufficient explosion or rapid burning of the vapor-air mixture takes place to cause the hinged cover to move; (ii) after clearing the atmosphere in the drum each time, repeat this test twice as before, except to spray in turn from the side and bottom openings.

#### **Sec. 19-301-2. Definition of "person"**

The word "person" in part II of chapter 348 of the general statutes may extend and be applied to communities, companies, corporations, public or private sources and associations.

#### **Sec. 19-301-3. Labeling of paints and lacquers containing toxic compounds**

All paints and lacquers shall be required to be labeled "Warning (or "Caution" or "Danger"): Do not apply to toys, furniture or interior surfaces which might be chewed by children!" unless: (a) They do not contain lead compounds in such proportion that the total lead content (calculated as Pb) of the contained solids (including pigments and drier) exceeds one per cent; or (b) no compounds of antimony, arsenic, cadmium, mercury or selenium, or of barium in a form soluble by stirring for ten minutes with five percent hydrochloric acid at room temperature, have been introduced as such in their formulation.

#### **Sec. 19-301-4. Labeling of self-pressurized dispensers**

All self-pressurized dispensers shall bear the following statement, or the equivalent thereof: "Warning (or "Caution")! Contents under pressure. Do not puncture. Keep at room temperature, and away from direct sunlight, radiators, stoves, hot water and other heat. Exposure to high temperature may cause this container to burst. Never throw into fire or incinerator."