§ 1500.3 Definitions.

(a) *Certain terms used in this part.* As used in this part:

(1) *Act* means the Federal Hazardous Substances Act (Pub. L. 86-613, 74 Stat. 372-81 (<u>15</u> <u>U.S.C. 1261-74</u>)) as amended by:

(i) The Child Protection Act of 1966 (Pub. L. 89-756, 80 Stat. 1303-05).

(ii) The Child Protection and Toy Safety Act of 1969 (Pub. L. 91-113, 83 Stat. 187-90).

(iii) The Poison Prevention Packaging Act of 1970 (Pub. L. 91-601, 84 Stat. 1670-74).

(2) *Commission* means the Consumer Product Safety Commission established May 14, 1973, pursuant to provisions of the Consumer Product Safety Act (Pub. L. 92-573, 86 Stat. 1207-33 (<u>15 U.S.C. 2051-81</u>)).

(15)

(i) Banned hazardous substance means:

(A) Any toy, or other article intended for use by children, which is a hazardous substance, or which bears or contains a hazardous substance in such manner as to be susceptible of access by a child to whom such toy or other article is entrusted; or

(B) Any hazardous substance intended, or packaged in a form suitable, for use in the household, which the Commission by regulation classifies as a "banned hazardous substance" on the basis of a finding that, notwithstanding such cautionary labeling as is or may be required under the act for that substance, the degree or nature of the hazard involved in the presence or use of such substance in households is such that the objective of the protection of the public health and safety can be adequately served only by keeping such substance, when so intended or packaged, out of the channels of interstate commerce; *Provided*, That the Commission by regulation

(1) shall exempt from section 2(q)(1)(A) of the act (restated in paragraph (b)(15)(i)(A) of this section) articles, such as chemistry sets, which by reason of their functional purpose require the inclusion of the hazardous substance involved, or necessarily present an electrical, mechanical, or thermal hazard, and which bear labeling giving adequate directions and warnings for safe use and are intended for use by children who have attained sufficient maturity, and may reasonably be expected, to read and heed such directions and warnings, and

(2) shall exempt from section 2(q)(1)(A) of the act (restated in paragraph (b)(15)(i)(A) of this section), and provide for the labeling of, common fireworks (including toy paper caps, cone fountains, cylinder fountains, whistles without report, and sparklers) to the

extent that the Commission determines that such articles can be adequately labeled to protect the purchasers and users thereof.

§ 1500.14 Products requiring special labeling under section 3(b) of the act.

(b) The Commission finds that the following substances present special hazards and that, for these substances, the labeling required by section 2(p)(1) of the act is not adequate for the protection of the public health. Under section 3(b) of the act, the following specific label statements are deemed necessary to supplement the labeling required by section 2(p)(1) of the act:

(7) *Fireworks devices.* Because of the special hazards presented by fireworks devices if not used in a certain manner, the following listed fireworks devices shall be labeled as indicated:

(i) Fountains.

Warning (or Caution)

FLAMMABLE (or EMITS SHOWERS OF SPARKS, if more descriptive).

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Place on level surface.

Light fuse and get away.

(ii) California candles.

Warning (or Caution) Emits Showers of Sparks

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Hold in hand at bottom of tube.

Point away from body so that neither end points toward body.

(iii) Spike and handle cylindrical fountains.

(A) Spike fountains.

Warning (or Caution) Emits Showers of Sparks

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Stick firmly in ground in an upright position.

Do not hold in hand.

Light fuse and get away.

(B) Handle fountains.

Warning (or Caution) Emits Showers of Sparks

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Hold in hand - point away from body.

Light fuse.

(iv) Roman Candles.

Warning (or Caution) Shoots Flaming Balls

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Stick butt end in ground.

Do not hold in hand.

Light fuse and get away.

(v) *Rockets with sticks*.

Warning (or Caution) Flammable

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Place in wooden trough or iron pipe at 75° angle, pointing away from people or flammable material.

Do not hold in hand.

Light fuse and get away.

(vi) Wheels.

Warning (or Caution) Flammable (or Emits Showers of Sparks, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Attach securely by means of a nail through the hole (or place on hard flat surface, for ground spinners).

Light fuse and get away.

(vii) Illuminating torches.

Warning (or Caution) Flammable (or Emits Showers of Sparks, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Hold in hand - point away from body, clothing, or other flammable material (or place upright on level ground. Do not hold in hand, if more descriptive).

Light fuse (or light fuse and get away, if more descriptive).

(viii) Sparklers.

On the front and back panels:

Warning (or Caution) Flammable

On the side, front, back, top, or bottom panel.

Caution

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Do not touch glowing wire (or do not touch hot plastic, wood, etc., if more descriptive).

Hold in hand with arm extended away from body.

Keep burning end or sparks away from wearing apparel or other flammable material.

(ix) *Mines and shells*.

Warning (or Caution) Emits Showers of Sparks (or Shoots Flaming Balls, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Place on hard smooth surface (or place upright on level ground, if more descriptive).

Do not hold in hand.

Light fuse and get away.

(x) Whistles without report.

Warning (or Caution) Flammable

SHOOTS WHISTLE IN AIR (if applicable)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Do not hold in hand.

Light fuse and get away.

(xi) Toy smoke devices and flitter devices.

Warning (or Caution) Flammable (or Emits Showers of Sparks, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Do not hold in hand.

Light fuse and get away.

(xii) Helicopter-type rockets.

Warning (or Caution) Flammable (or Emits Showers of Sparks, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Place on hard, open surface.

Light fuse and get away.

(xiii) Party poppers.

Warning (or Caution) Flammable

Use only under [close] adult supervision. (Use of the word close is optional.)

Do not point either end toward face or other person.

Hold in hand - jerk string.

(xiv) *Missile-type rockets*.

Warning (or Caution) Flammable (or Emits Showers of Sparks, if More Descriptive)

Use only under [close] adult supervision. (Use of the word close is optional.)

For outdoor use only.

Place on hard, open surface.

Light fuse and get away.

(xv) *Labeling - General.* Any fireworks device not required to have a specific label as indicated above shall carry a warning label indicating to the user where and how the item is to be used and necessary safety precautions to be observed. All labels required under this section shall comply with the requirements of § 1500.121 of these regulations. (See also § 1500.17(a) (3), (8) and (9); § 1500.83(a)(27); § 1500.85(a)(2); and part 1507).

§ 1500.17 Banned hazardous substances.

(a) Under the authority of section 2(q)(1)(B) of the act, the Commission declares as banned hazardous substances the following articles because they possess such a degree or nature of hazard that adequate cautionary labeling cannot be written and the public health and safety can be served only by keeping such articles out of interstate commerce:

(3) Fireworks devices intended to produce audible effects (including but not limited to cherry bombs, M-80 salutes, silver salutes, and other large firecrackers, aerial bombs, and other fireworks designed to produce audible effects, and including kits and components intended to produce such fireworks) if the audible effect is produced by a charge of more than 2 grains of pyrotechnic composition; except that this provision shall not apply to such fireworks devices if all of the following conditions are met:

(i) Such fireworks devices are distributed to farmers, ranchers, or growers through a wildlife management program administered by the U.S. Department of the Interior (or by equivalent State or local government agencies); and

(ii) Such distribution is in response to a written application describing the wildlife management problem that requires use of such devices, is of a quantity no greater than required to control the problem described, and is where other means of control are unavailable or inadequate. (See also § 1500.14(b)(7); § 1500.17(a) (8) and (9); § 1500.83(a)(27); § 1500.85(a)(2); and part 1507).

(8) Firecrackers designed to produce audible effects, if the audible effect is produced by a charge of more than 50 milligrams (.772 grains) of pyrotechnic composition (not including firecrackers included as components of a rocket), aerial bombs, and devices that may be confused with candy or other foods, such as "dragon eggs," and "cracker balls" (also known as "ball-type caps"), and including kits and components intended to produce such fireworks except such devices which meet all of the following conditions:

(i) The fireworks devices are distributed to farmers, ranchers, or growers through a wildlife management program administered by the U.S. Department of Interior (or by equivalent State or local governmental agencies); and

(ii) Such distribution is in response to a written application describing the wildlife management problem that requires use of such devices, is of a quantity no greater than required to control the problem described, and is where other means of control is unavailable or inadequate. (See also § 1500.17(a) (3) and (9)).

(9) All fireworks devices, other than firecrackers, including kits and components intended to produce such fireworks, not otherwise banned under the act, that do not comply with the applicable requirements of part 1507 of this chapter, except fireworks devices which meet all the following conditions:

(i) The fireworks devices are distributed to farmers, ranchers, or growers through a wildlife management program administered by the U.S. Department of the Interior (or by equivalent State or local government agencies); and

(ii) Such distribution is in response to a written application describing the wildlife management problem that requires use of such devices, is of a quantity no greater than required to control the problem described, and is where other means of control is unavailable or inadequate. (See also § 1500.17(a) (3) and (8)).

§ 1500.83 Exemptions for small packages, minor hazards, and special circumstances.

(a) The following exemptions are granted for the labeling of hazardous substances under the provisions of § 1500.82:

(27) Packaged fireworks assortments intended for retail distribution are exempt from section 2(p)(1) of the act (repeated in § 1500.3(b)(14)(i)), if:

(i) The package contains only fireworks devices suitable for use by the public and designed primarily to produce visible effects by combustion, except that small devices designed to produce audible effects may also be included if the audible effect is produced by a charge of not more than 2 grains of pyrotechnic composition;

(ii) Each individual article in the assortment is fully labeled and in conformance with the requirements of the act and regulations thereunder; and

(iii) The outer package bears on the main display panel (or panels), within the borders of a rectangle and in the type size specified in § 1500.121, the caution statement "WARNING - This assortment contains items that may be hazardous if misused and should be used only under adult supervision. IMPORTANT - Read cautions on individual items carefully." (See also § 1500.14(b)(7); § 1500.17(a) (3), (8) and (9); § 1500.85(a)(2); and part 1507).

§ 1500.85 Exemptions from classification as banned hazardous substances.

(a) The term *banned hazardous substances* as used in section 2(q)(1)(A) of the act shall not apply to the following articles provided that these articles bear labeling giving adequate directions and warnings for safe use:

(2) Firecrackers designed to produce audible effects, if the audible effect is produced by a charge of not more than 50 milligrams (.772 grains) of pyrotechnic composition. (See also § 1500.14(b)(7); § 1500.17(a) (3), (8) and (9); and part 1507).

PART 1507 - FIREWORKS DEVICES Authority: 15 U.S.C. 1261-1262, 2079(d); 21 U.S.C. 371(e).

Source: 41 FR 22935, June 8, 1976, unless otherwise noted.

Cross Reference:

See also 1500.14(b)(7); 1500.17(a) (3), (8) and (9); 1500.83(a)(27) and 1500.85(a)(2).

§ 1507.1 Scope.

This part 1507 prescribes requirements for those fireworks devices (other than firecrackers) not otherwise banned under the act. Any fireworks device (other than firecrackers) which fails to conform to applicable requirements is a banned hazardous substance and is prohibited from the channels of interstate commerce. Any fireworks device not otherwise banned under the act shall not be a banned hazardous substance by virtue of the fact that there are no applicable requirements prescribed herein.

§ 1507.2 Prohibited chemicals.

Fireworks devices shall not contain any of the following chemicals:

(a) Arsenic sulfide, arsenates, or arsenites.

(b) Boron.

(c) Chlorates, except:

(1) In colored smoke mixtures in which an equal or greater amount of sodium bicarbonate is included.

(2) In caps and party poppers.

(3) In those small items (such as ground spinners) wherein the total powder content does not exceed 4 grams of which not greater than 15 percent (or 600 milligrams) is potassium, sodium, or barium chlorate.

(d) Gallates or gallic acid.

(e) Magnesium (magnesium/aluminum alloys, called magnalium, are permitted).

(f) Mercury salts.

(g) Phosphorus (red or white). Except that red phosphorus is permissible in caps and party poppers.

(h) Picrates or picric acid.

(i) Thiocyanates.

(j) Titanium, except in particle size greater than 100-mesh.

(k) Zirconium.

§ 1507.3 Fuses.

(a) Fireworks devices that require a fuse shall:

(1) Utilize only a fuse that has been treated or coated in such manner as to reduce the possibility of side ignition. Devices such as ground spinners that require a restricted orifice for proper thrust and contain less than 6 grams of pyrotechnic composition are exempted from 1507.3(a)(1).

(2) Utilize only a fuse which will burn at least 3 seconds but not more than 9 seconds before ignition of the device.

(b) The fuse shall be securely attached so that it will support either the weight of the fireworks device plus 8 ounces of dead weight or double the weight of the device, whether is less, without separation from the fireworks device.

[41 FR 22935, June 8, 1976, as amended at 61 FR 67200, Dec. 20, 1996; 61 FR 67200, Dec. 20, 1996]

§ 1507.4 Bases.

The base or bottom of fireworks devices that are operated in a standing upright position shall have the minimum horizontal dimensions or the diameter of the base equal to at least one-third of the height of the device including any base or cap affixed thereto.

§ 1507.5 Pyrotechnic leakage.

The pyrotechnic chamber in fireworks devices shall be sealed in a manner that prevents leakage of the pyrotechnic composition during shipping, handling, and normal operation.

§ 1507.6 Burnout and blowout.

The pyrotechnic chamber in fireworks devices shall be constructed in a manner to allow functioning in a normal manner without burnout or blowout.

§ 1507.7 Handles and spikes.

(a) Fireworks devices which are intended to be hand-held and are so labeled shall incorporate a handle at least 4 inches in length (see § 1500.14(b)(7)). Handles shall remain firmly attached during transportation, handling and full operation of the device, or shall consist of an integral section of the device at least four inches below the pyrotechnic chamber.

(b) Spikes provided with fireworks devices shall protrude at least 2 inches from the base of the device and shall have a blunt tip not less than 1/8-inch in diameter of 1/8-inch square.

§ 1507.8 Wheel devices.

Drivers in fireworks devices commonly known as "wheels" shall be securely attached to the device so that they will not come loose in transportation, handling, and normal operation. Wheel devices intended to operate in a fixed location shall be designed in such a manner that the axle remains attached to the device during normal operation.

§ 1507.9 Toy smoke devices and flitter devices.

(a) Toy smoke devices shall be so constructed that they will neither burst nor produce external flame (excluding the fuse and firstfire upon ignition) during normal operation.

(b) Toy smoke devices and flitter devices shall not be of such color and configuration so as to be confused with banned fireworks such as M-80 salutes, silver salutes, or cherry bombs.

(c) Toy smoke devices shall not incorporate plastic as an exterior material if the pyrotechnic composition comes in direct contact with the plastic.

§ 1507.10 Rockets with sticks.

Rockets with sticks (including skyrockets and bottle rockets) shall utilize a straight and rigid stick to provide a direct and stable flight. Such sticks shall remain straight and rigid and attached to the driver so as to prevent the stick from being damaged or detached during transportation, handling, and normal operation.

§ 1507.11 Party poppers.

Party poppers (also known by other names such as "Champagne Party Poppers," and "Party Surprise Poppers,") shall not contain more than 0.25 grains of pyrotechnic composition. Such devices may contain soft paper or cloth inserts provided any such inserts do not ignite during normal operation.

§ 1507.12 Multiple-tube fireworks devices.

(a) *Application*. Multiple-tube mine and shell fireworks devices with any tube measuring 1.5 inches (3.8 cm) or more in inside diameter and subject to § 1500.17(a)(12) of this part shall not tip over when subjected to the tip-angle test described in this section.

(b) *Testing procedure.* The device shall be placed on a smooth surface that can be inclined at 60 degrees from the horizontal, as shown in Figure 1 of this section. The height and width of the inclined plane (not including the portion of the plane below the mechanical stop) shall be at least 1 inch (2.54 cm) greater than the largest dimension of the base of the device to be tested. The test shall be conducted on a smooth, hard surface that is horizontal as measured by a spirit level or equivalent instrument. The mechanical stop on the inclined plane shall be 1/16 inches (1.6 mm) in height and perpendicular to the inclined plane. The stop shall be positioned parallel to the bottom edge of the inclined plane and so that no portion of the device to be tested or its base touches the horizontal surface. The device shall not tip over when the plane is inclined at 60-degrees from the horizontal. The procedure shall be repeated for each edge of the device.

Figure 1 to § 1507.12



Side view of an apparatus or testing block for testing compliance with the proposed 60-degree tilt angle standard.