



GUIDANCE AND CRITERIA FOR FIREWORKS NOVELTY DEVICES

A. **SYNOPSIS:** The U.S. Department of Transportation is providing the following guidance and required provisions for novelty devices listed in the American Pyrotechnics Association Standard 87-1 version 2001 that are not regulated as explosives.

B. **REQUIREMENTS:** Novelty devices (often referred to as novelties) may be transported as not regulated as explosives by surface modes when the novelty devices comply with all the construction, formulation and packaging requirements listed below. An EX approval (EX number) or FC certification letter (FC number) is not required to ship novelty devices into or within the United States when the novelties conform to the guidance described in this document. When novelties are transported by air, they must be classed as UN 3178, Flammable solid, inorganic, n.o.s. (novelties), 4.1, PG II.

Novelties must be manufactured and packaged in accordance with the following:

1. **Snappers:** small, paper-wrapped items containing not more than 1.0 milligram of silver fulminate coated on small bits of sand or gravel. When dropped, the device explodes, producing a small report.

Inner Packaging: must not contain more than 50 snappers with sawdust or other impact-absorbing materials.

2. **Party Poppers:** small devices with paper, cardboard, or plastic exteriors that are actuated by means of friction (e.g. pulling a string or trigger). Upon activation, the device produces a noise effect and releases flame-resistant material (e.g. paper streamers, confetti). Devices may not contain more than 16 milligrams (0.25 grains) of pyrotechnic composition, which is limited to potassium chlorate and red phosphorus.

Inner Packaging: must not contain more than 72 devices.

3. **Toy Smoke Devices:** small devices made of cork, clay, cardboard or plastic tubes containing not more than 5 grams of pyrotechnic composition that produces smoke as the sole effect after activation. Smoke devices must be constructed so that they will neither burst nor produce excessive flame after activation. The chemical composition typically consists of potassium nitrate and sulfur for white smoke and combinations of potassium chlorate, sulfur, sugar, and organic dyes for colored smoke. All mixtures containing potassium chlorate must also contain an equal amount of carbonate or bicarbonate (e.g. calcium carbonate, sodium bicarbonate). No prohibited chemicals are permitted (see Section 3.7 of APA Standard 87 1 for the list of prohibited chemicals).

Inner Packaging: must not contain more than 72 devices.

4. **Snakes and Glow Worms:** pressed pellets of pyrotechnic composition containing not more than 2 grams of composition per device. Upon ignition, snakes and glow worms produce a snake-like ash that expands in length as the device is consumed. The chemical composition typically consists of ammonium perchlorate, nitrated pitch, asphaltum, and carbonaceous materials. No prohibited chemicals are permitted (see Section 3.7 of APA Standard 87 1 for the list of prohibited chemicals).

Inner Packaging: must not contain more than 25 devices.

5. **Sparklers:** devices that consist of a wire or wood dowel coated with not more than 100 grams pyrotechnic composition that produces a shower of sparks upon ignition. Sparklers that contain potassium chlorate or potassium perchlorate may not contain more than 5 grams of chemical composition per device. Sparklers typically use barium nitrate with aluminum and dextrin. No prohibited chemicals are permitted (see Section 3.7 of APA Standard 87 1 for the list of prohibited chemicals).

Inner Packaging: must not contain more than 8 devices.

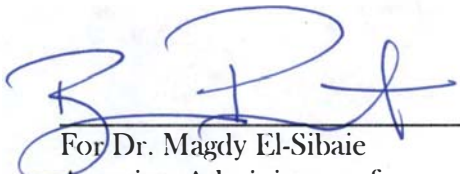
C. **Testing:** All novelty devices must successfully pass a thermal stability test specified in 49 CFR § 173.64(a) (2).

D. **Outer Packaging:** Novelty devices in their inner packaging must be packaged in strong outer packagings. The packages must conform to the requirements of 49 CFR § 173.24. The maximum gross weight of any outer package may not exceed 30 kg (66.2 lbs.).

E. **Marking Requirements:** Each outer package and over pack, if used, containing novelties that conform to the criteria in this document must be plainly marked "NOVELTIES, NOT REGULATED, EXCEPT WHEN TRANSPORTED BY AIR."

F. **Modes of Transportation Authorized:** Motor vehicle, rail freight, cargo vessel, passenger aircraft* and cargo aircraft*

*When novelties are transported by air, they must be classed as UN 3178, Flammable solid, inorganic, n.o.s. (novelties), 4.1, PG II.


For Dr. Magdy El-Sibaie
Associate Administrator for
Hazardous Materials Safety

March 19, 2015
Date