

Fireworks (EX) Approval Application - APA Standard 87-1

Note: PLEASE DO NOT STAPLE

1. **Item Name:** _____ **This is a series application (Y/N):** _____

2. **Applicant:**

Name/Title: _____

Company Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

Note: A foreign applicant must provide a designated U.S. agent of service (name of contact person, email address and phone number required).

U.S. responsible party: _____

Name/Affiliation: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

3. **DOT Class:**

Fireworks UN 0336, 1.4G

Fireworks UN 0335, 1.3G

Fireworks UN 0333, 1.1G

Article Pyrotechnic UN 0431, 1.4G

Other: _____

4. **Manufacturer:**

Company Name: _____

Address: _____

Phone: _____

Fax: _____

Email: _____

5. **Category of Device:** (under APA 87-1):

Cylindrical Fountain

Cone Fountain

Rocket

Mine/Shell

Roman Candle

Wheel

Reloadable Shell Kit

Other: _____

Aerial Shell (non-salute)

Aerial Shell (salute)

Other: _____

6. Diagram of the Device: Attach as a separate file

7. Chemical Composition: See attached chemical composition sheet

8. Description of Device:

Number of tubes: _____

Tube separation (over 200 gram device): _____

Diameter of device (or range of diameters for a series): _____

Maximum powder weight per tube: _____

For 1.4G mine/shell: Max. propellant/tube: _____

Maximum effect/tube (including burst): _____

Total powder weight in device: _____

Tubes are fused in sequence (if UN0336 multiple-tube item) (yes / no) _____

Does item have a report? (yes/no) _____

Number of reports per tube: _____ Number of tubes: _____

If yes, max. weight per individual report: _____ mg

Total weight of report powder in item: _____ grams

Effect produced (e.g., shoots red star in air): _____

9. For Reloadable Shell Kits:

(Note: Reloadable shell kits are limited to 400 grams of pyrotechnic composition and must be packaged in a ratio not to exceed 12 shells to 1 tube)

Maximum number of shells per kit: _____

Maximum weight of pyrotechnic composition per shell: _____ grams

Maximum total weight of pyrotechnic composition per kit: _____ grams

Each kit contains at least one launching tube: (yes/no) _____

10. Thermal stability test results:

A thermal stability test of this device was performed on

(date) (name of tester) (job title) (company)

The test was performed on: finished item component chemical mixtures, as present together in the device. The device did not ignite, explode, or undergo any significant decomposition during heating at 75° C (167° F) for 48 hours.

11. Certification:

This is to certify that the device for which approval is requested conforms to APA Standard 87-1 and that the descriptions and technical information contained in this application are complete and accurate.

(date) (Signature of applicant named above) (typed name of applicant, in English)

Fireworks (EX) Approval Application - APA Standard 87-1

Chemical Composition List for (Item name): _____

Total weight of pyrotechnic composition in Item: _____

Effect and total weight for each composition (e.g., red star – 21 g; propellant – 18 g):

- | | | |
|------------------|------------------|------------------|
| 1. _____, _____g | 3. _____, _____g | 5. _____, _____g |
| 2. _____, _____g | 4. _____, _____g | 6. _____, _____g |
- Weight %**

Chemicals¹

		1	2	3	4	5	6
Potassium Nitrate	KNO ₃						
Potassium Perchlorate	KClO ₄						
Ammonium Perchlorate	NH ₄ ClO ₄						
Barium Nitrate	Ba(NO ₃) ₂						
Strontium Nitrate	Sr(NO ₃) ₂						
Sulfur							
Charcoal							
Aluminum****							
Magnallum ****	Mg/Al alloy						
Dextrine							

RESTRICTED CHEMICAL

Potassium Chlorate	KClO ₃						
Magnesium							
Titanium***** See Note							

NOTE(s):

***** titanium - particle size must be larger than 149 microns

***** particle size must be provided for all metals in the Fireworks (EX) Approval Application

(1) The above list is from Table 4.3-1 of APA Standard 87-1, "Standard Fireworks Chemicals".
 (2) Each chemical must be listed in Table 4.3-1
 (3) For specifics on the Restricted Chemicals, see APA Standard 87-1

DIAGRAM OF DEVICE

(note: include and mark all dimensions, fusing sequence, external ignition fuse, empty tubes, effects)

Item Name: _____

This is a series application (Y/N): _____