

USPS Packaging Instruction 1A

Toy Propellant Devices

The proper shipping name for a mailable toy propellant device is “model rocket motor” or “igniter.” A device that is assigned identification number NA0323 or UN0454 and classed as a Division 1.4S explosive is eligible for mailing in domestic mail via surface transportation only, provided all requirements are met and the device is properly packaged as follows.

Proper Shipping Name and ID Number

- Model Rocket Motors, NA0323
- Igniters, UN0454

Required Authorization

Prior written permission must be obtained from the Manager, Business Mail Acceptance, USPS Headquarters, Washington, DC (see DMM G043 for mailing address).

Mailability

- International Mail: Prohibited.
- Domestic Mail: Permitted only via surface transportation (i.e., Standard Mail rates) and with prior approval. Each device must meet the specifications in 341.22a.

Design Specifications

Mailable devices must meet each of the following conditions:

- Each device must be ignitable by electrical means only.
- Each device must contain no more than 62.5 g (2.23 oz) of propellant.
- Each device must produce less than 80 newton seconds of total impulse with thrust duration not less than 0.050 second.
- Each device must be constructed so that all chemical ingredients are preloaded into a cylindrical paper or similarly constructed nonmetallic tube that does not fragment into sharp, hard pieces.
- Each device must be designed so that it will not burst under normal conditions.
- Each device must be incapable of spontaneous ignition under 500° F.
- Each device must not contain any type of explosive or pyrotechnic warhead other than a small, activation-charge parachute-recovery system.

Required Packaging

Inner Receptacle

- Each device must be packed in a securely sealed primary receptacle made of fiberboard, wood, or metal.
- Multiple primary receptacles are permitted.

Cushioning Material

- Each primary receptacle must be surrounded by sufficient cushioning material to absorb shock and prevent breakage.

Outer Packaging

- A strong outer packaging that is capable of firmly and securely holding the primary receptacle(s) and cushioning material is required.
- Each mailpiece must not exceed a total weight of 25 pounds.

Marking

- Each outer packaging must be clearly marked on the address side with “Toy Propellant Devices” followed by the applicable proper shipping name and UN or NA number. The markings “Surface Mail Only” and “Handle With Care” must also appear on the address side of the mailpiece. A DOT hazardous materials warning label must not be affixed.
- A complete mailing address and return address must be used.

Documentation

- A properly completed shipper's declaration for dangerous goods prepared in triplicate must be affixed to the outside of the mailpiece.

Note: Full responsibility rests with the mailer to comply with DOT and ATF regulations before mailing.