

(iii) The total quantity of activator and base material may not exceed 1 kg (2.2 pounds) per package for a Packing Group II base material. The total quantity of activator and base material may not exceed 5 kg (11 pounds) per package for a Packing Group III base material. The total quantity of polyester resin kits per package is calculated on a one-to-one basis (*i.e.*, 1 L equals 1 kg);

(iv) Fragile inner packagings must be packaged to prevent failure under conditions normally incident to transport. Packages of consumer commodities must be capable of withstanding a 1.2 m drop on solid concrete in the position most likely to cause damage; and

(v) *Stack test capability.* Packages of consumer commodities must be capable of withstanding, without failure or leakage of any inner packaging and without any significant reduction in effectiveness, a force applied to the top surface for a duration of 24 hours equivalent to the total weight of identical packages if stacked to a height of 3.0 m (including the test sample).

(d) [Reserved]

[82 FR 15880, Mar. 30, 2017, as amended at 87 FR 79777, Dec. 27, 2022]

§ 173.166 Safety devices.

For the purpose of this section, safety devices are articles which contain pyrotechnic substances or hazardous materials of other classes and are used in vehicles, vessels or aircraft to enhance safety to persons. Examples are: air bag inflators, air bag modules, seat-belt pretensioners and pyromechanical devices. Pyromechanical devices are assembled components for tasks such as but not limited to separation, locking, release-and-drive or occupant restraint. The term includes “Safety devices, pyrotechnic.”

(a) *Definitions.* An *air bag inflator* (consisting of a casing containing an igniter, a booster material, a gas generant and, in some cases, a pressure receptacle (cylinder)) is a gas generator used to inflate an air bag in a supplemental restraint system in a motor vehicle. An *air bag module* is the air bag inflator plus an inflatable bag assembly. A *seat-belt pretensioner* contains similar hazardous materials and is used

in the operation of a seat-belt restraining system in a motor vehicle.

(b) *Classification.* (1) Safety devices, excluding those which contain flammable or toxic gases or mixtures thereof, may be classed as Class 9 (UN3268) if the safety device, or if more than a single safety device is involved then the representative of the maximum parameters of each design type, is examined and successfully tested by a person or agency who is authorized by the Associate Administrator to perform examination and testing of explosives under § 173.56(b)(1), and who:

(i) Does not manufacture or market explosives or safety devices, is not owned in whole or in part, or is not financially dependent upon any entity that manufactures or markets explosives or safety devices;

(ii) Performs all examination and testing in accordance with the applicable requirements as specified in special provision 160 (see § 172.102 of this subchapter); and

(iii) Maintains records in accordance with paragraph (g) of this section.

(iv) By adhering to all the provisions specified in paragraph (b)(1) of this section, a Class 9 (UN3268) air bag inflator, air bag module or seat-belt pretensioner design is not required to be submitted to the Associate Administrator for approval or assigned an EX number. All other Class 9 (UN3268) safety device designs are required to be submitted to the Associate Administrator for approval and assigned an EX number;

(2) A safety device may be classed as Division 1.4G if the maximum parameters of each design type have been examined and successfully tested by a person or agency who is authorized by the Associate Administrator to perform such examination and testing of explosives under § 173.56(b)(1). As a Class 1 explosive, the manufacturer must submit to the Associate Administrator a report of the examination and assignment of a recommended shipping description, division, and compatibility group, and if the Associate Administrator finds the approval request meets the regulatory criteria, the explosive may be approved in writing and assigned an EX number; or

(3) The manufacturer has submitted an application, including a classification issued by the competent authority of a foreign government to the Associate Administrator, and received written notification from the Associate Administrator that the device has been approved for transportation and assigned an EX number.

(c) *EX numbers.* (1) When a safety device is classed and approved as a Division 1.4G and offered for transportation, the shipping paper must contain the EX number or product code for each approved device in association with the basic description required by §172.202(a) of this subchapter. Product codes must be traceable to the specific EX number assigned to the device by the Associate Administrator. Further, if the EX number or product code is contained on the shipping paper then it is not required to be marked on the outside package.

(2) A safety device, when classed as a Class 9 (UN3268), is excepted from the EX number, or product code shipping paper requirements of paragraph (c) of this section.

(d) *Exceptions.* (1) A safety device that is classed as a Class 9 (UN3268) under the terms of paragraph (b)(1) of this section and is installed in a motor vehicle, aircraft, boat or other transport conveyance or its completed components, such as steering columns or door panels, is not subject to the requirements of this subchapter. A safety device that has been classed as a Division 1.4G and approved by the Associate Administrator and is installed in a motor vehicle, aircraft, boat or other transport conveyance or its completed components, such as steering columns or door panels, is not subject to the requirements of this subchapter.

(2) An air bag module containing an inflator that has been previously approved by the Associate Administrator for transportation is not required to be submitted for further examination or approval. For classifications granted after July 30, 2013, if the Class 9 designation for the inflator is contingent upon packaging or other special means specified by the authorized testing agency, the modules must be tested and certified separately to determine if

they can be shipped as “UN3268, Safety Devices, 9, PG III”.

(3) An air bag module containing an inflator that has previously been approved by the Associate Administrator as a Division 2.2 material is not required to be submitted for further examination to be reclassified as a Class 9 material.

(4) *Shipments to recycling or waste disposal facilities.* When offered for domestic transportation by highway, rail freight, cargo vessel or cargo aircraft, a serviceable safety device classed as either Class 9 (UN3268) or Division 1.4G removed from a motor vehicle that was manufactured as required for use in the United States may be offered for transportation and transported without compliance with the shipping paper requirement prescribed in paragraph (c) of this section. However, when these articles are shipped to a recycling facility, the word “Recycled” must be entered on the shipping paper immediately after the basic description prescribed in §172.202 of this subchapter. No more than one device is authorized in the packaging prescribed in paragraphs (e)(1), (2) or (3) of this section. The device must be cushioned and secured within the package to prevent shifting during transportation.

(5) An air bag inflator, air bag module, or seat-belt pretensioner that was classed and approved for transportation prior to January 1, 2015 may continue to be transported under the terms of the existing approval, using the appropriate proper shipping name “Safety Devices” or “Safety Devices, Pyrotechnic” based on the classification of the device as assigned by PHMSA or the authorized person or agency that examined and tested the design type.

(6) Until January 1, 2016, for domestic transportation by highway, rail, and vessel, packages containing air bag inflators, air bag modules, or seat-belt pretensioners may be;

(i) Marked with either the appropriate proper shipping name, or an appropriate proper shipping name authorized by §172.101 in effect on December 31, 2014; and

(ii) Described on a shipping paper with either the appropriate proper

shipping name, or an appropriate proper shipping name authorized by §172.101 in effect on December 31, 2014.

(e) *Packagings*. Rigid, outer packagings, meeting the general packaging requirements of part 173 are authorized as follows. Additionally, the UN specification packagings listed in paragraphs (e)(1), (2), and (3) of this section must meet the packaging specification and performance requirements of part 178 of this subchapter at the Packing Group III performance level. The packagings must be designed and constructed to prevent shifting of the articles and inadvertent activation. Further, if the Class 9 designation is contingent upon packaging specified by the authorized testing agency, shipments of the safety device must be in compliance with the prescribed packaging.

(1) 1A2, 1B2, 1N2, 1D, 1G, or 1H2 drums.

(2) 3A2, 3B2, or 3H2 jerricans.

(3) 4A, 4B, 4N, 4C1, 4C2, 4D, 4F, 4G, 4H1, or 4H2 boxes.

(4) *Reusable high-strength containers or dedicated handling devices*. (i) Reusable containers manufactured from high-strength plastic, metal, or other suitable material, or other dedicated handling devices are authorized for shipment of safety devices from a manufacturing facility to the assembly facility, subject to the following conditions:

(A) The gross weight of the containers or handling devices may not exceed 1000 kg (2205 pounds). Containers or handling devices must provide adequate support to allow stacking at least three units high with no resultant damage;

(B) If not completely enclosed by design, the container or handling device must be covered with plastic, fiberboard, metal, or other suitable material. The covering must be secured to the container by banding or other comparable methods; and

(C) Internal dunnage must be sufficient to prevent shifting of the devices within the container.

(ii) Reusable containers manufactured from high-strength plastic, metal, or other suitable material, or other dedicated handling devices are authorized for shipment of safety devices only to, between, and from, inter-

mediate handling locations, provided they meet the conditions specified in paragraphs (e)(4)(i)(A) through (C) of this section and:

(A) The packages may be opened and re-packed by an intermediate handler as long as no modifications or changes are made to the packagings; and

(B) Transportation must be made by private or contract carrier.

(5) Packagings which were previously authorized in an approval issued by the Associate Administrator may continue to be used, provided a copy of the approval is maintained while such packaging is being used.

(6) *Safety devices removed from a vehicle*. When removed from, or were intended to be used in, a motor vehicle that was manufactured as required for use in the United States and offered for domestic transportation by highway or cargo vessel to Recycling or Waste Disposal facilities, a serviceable safety device classed as Class 9 UN3268 may be offered for transportation and transported in the following additional packaging:

(i) Specification and non-specification steel drums with a wall and lid thickness not less than 20 gauge. The lid must be securely affixed with a lever-locking or bolted-ring assembly. The lid of the drum must provide ventilation of the drum contents in a fire. The drum may be filled with any combination of safety devices to a capacity not greater than fifty (50) percent of the drum's total volume. In addition, inner packagings or cushioning may not be used to fill the void space; or

(ii) Outer packaging consisting of 4H2 solid plastic boxes or non-specification rugged reusable plastic outer packaging and inner static-resistant plastic bags or trays. If not completely enclosed by design, the container or handling device must be covered with plastic, fiberboard, metal or other suitable material. The covering must be secured to the container by banding or other comparable methods. The articles must be packed to prevent shifting within the container during transportation.

(f) *Labeling*. Notwithstanding the provisions of §172.402, each package or handling device must display a CLASS 9 label. Additional labeling is not required when the package contains no

hazardous materials other than the devices.

(g) *Recordkeeping requirements.* (1) Following the examination of each new design type classed as a Class 9 in accordance with paragraph (b)(1) of this section, the person that conducted the examination must prepare a test report and provide the test report to the manufacturer of the safety device. At a minimum, the test report must contain the following information:

- (i) Name and address of the test facility;
 - (ii) Name and address of the applicant;
 - (iii) Manufacturer of the device. For a foreign manufacturer, the U.S. agent or importer must be identified;
 - (iv) A test report number, drawing of the device, and description of the safety device in sufficient detail to ensure that the test report is traceable (*e.g.* a unique product identifier) to a specific design;
 - (v) The tests conducted and the results; and
 - (vi) A certification that the safety device is classed as a Class 9 (UN3268).
- (2) For at least fifteen (15) years after testing, a copy of each test report must be maintained by the authorizing testing agency. For as long as any safety device design is being manufactured, and for at least fifteen (15) years thereafter, a copy of each test report must be maintained by the manufacturer of the product.
- (3) Test reports must be made available to a representative of the Department upon request.

[80 FR 1157, Jan. 8, 2015, as amended at 81 FR 35541, June 2, 2016; 85 FR 83398, Dec. 21, 2020]

§ 173.167 Consumer commodities.

(a) Effective January 1, 2013, a “consumer commodity” (see §171.8 of this subchapter) when offered for transportation by aircraft may only include articles or substances of Class 2 (non-toxic aerosols only), Class 3 (Packing Group II and III only), Division 6.1 (Packing Group III only), UN3077, UN3082, UN3175, UN3334, and UN3335, provided such materials do not have a subsidiary risk and are authorized aboard a passenger-carrying aircraft. Consumer commodities are excepted from the specification outer packaging

requirements of this subchapter. Packages prepared under the requirements of this section are excepted from labeling and shipping papers when transported by highway or rail. Except as indicated in §173.24(i), each completed package must conform to §§173.24 and 173.24a of this subchapter. Additionally, except for the pressure differential requirements in §173.27(c), the requirements of §173.27 do not apply to packages prepared in accordance with this section. Packages prepared under the requirements of this section may be offered for transportation and transported by all modes. As applicable, the following apply:

- (1) *Inner and outer packaging quantity limits.* (i) Non-toxic aerosols, as defined in §171.8 of this subchapter and constructed in accordance with §173.306 of this part, in non-refillable, non-metal containers not exceeding 120 mL (4 fluid ounces) each, or in non-refillable metal containers not exceeding 820 mL (28 ounces) each, except that flammable aerosols may not exceed 500 mL (16.9 ounces) each;
- (ii) Liquids, in inner packagings not exceeding 500 mL (16.9 ounces) each. Liquids must not completely fill an inner packaging at 55 °C;
- (iii) Solids, in inner packagings not exceeding 500 g (1.0 pounds) each; or
- (iv) Any combination thereof not to exceed 30 kg (66 pounds) gross weight as prepared for shipment.

(2) *Closures.* Friction-type closures must be secured by positive means. The body and closure of any packaging must be constructed so as to be able to adequately resist the effects of temperature and vibration occurring in conditions normally incident to air transportation. The closure device must be so designed that it is unlikely that it can be incorrectly or incompletely closed.

(3) *Absorbent material.* Inner packagings must be tightly packaged in strong outer packagings. Absorbent and cushioning material must not react dangerously with the contents of inner packagings. Glass or earthenware inner packagings containing liquids of Class 3 or Division 6.1, sufficient absorbent material must be provided to absorb the entire contents of the largest inner packaging contained in the