

§ 175.78

49 CFR Ch. I (10–1–01 Edition)

§ 175.78 Stowage compatibility of cargo.

(a) For stowage on an aircraft, in a cargo facility, or in any other area at an airport designated for the stowage of hazardous materials, packages containing hazardous materials which might react dangerously with one another may not be placed next to each other or in a position that would allow

a dangerous interaction in the event of leakage.

(b) As a minimum, the segregation instructions prescribed in the following Segregation Table must be followed to maintain acceptable segregation between packages containing hazardous materials with different hazards. The Segregation Table instructions apply whether or not the class or division is the primary or subsidiary risk. The Segregation Table follows:

SEGREGATION TABLE

Hazard label	Class or division							
	1	2	3	4.2	4.3	5.1	5.2	8
1	Note 1	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2	Note 2
2	Note 2	.....	.....	.....	.....	.....	.....	.....
3	Note 2	.....	.....	.....	.....	X	.....	.....
4.2	Note 2	.....	.....	.....	.....	X	.....	.....
4.3	Note 2	.....	.....	.....	.....	.....	.....	X
5.1	Note 2	.....	X	X	.....	.....	.....	.....
5.2	Note 2	.....	.....	.....	.....	.....	.....	.....
8	Note 2	.....	.....	.....	X	.....	.....	.....

(c) Instructions for using the Segregation Table are as follows:

(1) The dots at the intersection of a row and column indicate that no restrictions apply.

(2) The letter “X” at the intersection of a row and column indicates that packages containing these classes of hazardous materials may not be stowed next to or in contact with each other, or in a position which would allow interaction in the event of leakage of the contents.

(3) NOTE 1. “Note 1” at the intersection of a row and column means the following:

(i) For explosives in compatibility groups A through K and N —

(A) Packages bearing the same compatibility group letter and the same division number may be stowed together.

(B) Explosives of the same compatibility group, but different divisions may be stowed together provided the whole shipment is treated as belonging to the division having the smaller number. However, when explosives of

Division 1.5 Compatibility Group D are stowed together with explosives of Division 1.2 Compatibility Group D, the whole shipment must be treated as Division 1.1, Compatibility Group D.

(C) Packages bearing different compatibility group letters may not be stowed together whether or not they belong to the same division, except as provided in paragraphs (c)(3)(ii) and (iii) of this section.

(ii) Explosives in Compatibility Group L may not be stowed with explosives in other compatibility groups. They may only be stowed with the same type of explosives in Compatibility Group L.

(iii) Explosives of Division 1.4, Compatibility Group S, may be stowed with explosives of all compatibility groups except for Compatibility Groups A and L.

(iv) Other than explosives of Division 1.4, Compatibility Group S (see paragraph (c)(3)(iii) of this section), and Compatibility Groups C, D and E that may be stowed together, explosives

that do not belong in the same compatibility group may not be stowed together.

(A) Any combination of substances in Compatibility Groups C and D must be assigned to the most appropriate compatibility group shown in the §172.101 Table of this subchapter.

(B) Explosives in Compatibility Group N may be stowed together with explosives in Compatibility Groups C, D or E when the combination is assigned Compatibility Group D.

(4) NOTE 2. "Note 2" at the intersection of a row and column means that other than explosives of Division 1.4, Compatibility Group S, explosives may not be stowed together with that class.

(5) Packages containing hazardous materials with multiple hazards in the class or divisions, which require segregation in accordance with the Segregation Table need not be segregated from other packages bearing the same UN number.

(6) A package labeled "BLASTING AGENT" may not be stowed next to or in a position that will allow contact with a package of special fireworks or railway torpedoes.

[66 FR 33437, June 21, 2001]

§ 175.79 Orientation of cargo.

(a) A package containing hazardous materials marked "THIS SIDE UP" or "THIS END UP", or with arrows to indicate the proper orientation of the package, must be stored and loaded aboard an aircraft in accordance with such markings.

(b) A package containing liquid hazardous materials not marked as indicated in paragraph (a) of this section, must be stored and loaded with closures up (other than side closures in addition to top closures).

[Amdt. 175-25, 47 FR 54823, Dec. 6, 1982]

§ 175.81 Securing of packages containing hazardous materials.

(a) Packages containing hazardous materials must be secured in an aircraft in a manner that will prevent any movement in flight which would result in damage to or change in the orientation of the packages.

(b) Packages containing Class 7 (radioactive) materials must be secured in

a manner that insures that the separation requirements of §§175.701 and 175.702 will be maintained at all times during flight.

[Amdt. 175-25, 47 FR 54823, Dec. 6, 1982, as amended by Amdt. 175-47, 55 FR 52685, Dec. 21, 1990]

§ 175.85 Cargo location.

(a) Except as provided in §175.10, no person may carry a hazardous material subject to the requirements of this subchapter in the cabin of a passenger-carrying aircraft or on the flight deck of any aircraft. Hazardous materials may be carried in a main deck cargo compartment of a passenger aircraft provided that the compartment is inaccessible to passengers and that it meets all certification requirements for a Class B aircraft cargo compartment in 14 CFR 25.857(b) or for a Class C aircraft cargo compartment in 14 CFR 25.857(c).

(b) Each package containing a hazardous material acceptable only for cargo aircraft must be loaded in such a manner that a crew member or other authorized person can see, handle and when size and weight permit, separate such packages from other cargo during flight.

(c) Notwithstanding the provisions of paragraph (b) of this section:

(1) When packages of the following hazardous materials are carried on cargo aircraft only, they may be carried in a location which is inaccessible to a crewmember during flight and are not subject to the weight limitation specified in paragraph (a)(2) of §175.75 of this subchapter.

- (i) Class 7 (radioactive) materials,
- (ii) Division 6.1 (poisonous) materials (except those labeled FLAMMABLE),
- (iii) Materials in Division 6.2 (etiologic or infectious substances),
- (iv) Class 3 (flammable liquid) materials with a flash point above 23 °C (73 °F) that do not meet the definition of another hazardous class,
- (v) Class 9 (miscellaneous hazardous) materials, and ORM-D materials.

(2) When packages of hazardous materials acceptable for cargo-only or passenger-carrying aircraft are carried on cargo aircraft only where other means of transportation are impracticable or not available, packages may