Revision: 3 Date: 4-26-2018 Table II.A.4.b-2

Segregation Table of Hazardous Materials

49 CFR 177.848 SEGREGATION OF HAZARDOUS MATERIALS.

- (a) This section applies to materials which meet one or more of the hazard classes defined in this subchapter and are:
- (1) In packages that must be labeled or placarded in accordance with part 172 of this subchapter;
- (2) In a compartment within a multi-compartmented cargo tank subject to the restrictions in §173.33 of this subchapter; or
- (3) In a portable tank loaded in a transport vehicle or freight container.
- (b) When a transport vehicle is to be transported by vessel, other than a ferry vessel, hazardous materials on or within that vehicle must be stowed and segregated in accordance with §176.83(b) of this subchapter.
- (c) In addition to the provisions of paragraph (d) of this section and except as provided in §173.12(e) of this subchapter, cyanides, cyanide mixtures or solutions may not be stored, loaded and transported with acids if a mixture of the materials would generate hydrogen cyanide; Division 4.2 materials may not be stored, loaded and transported with Class 8 liquids; and Division 6.1 Packing Group I, Hazard Zone A material may not be stored, loaded and transported with Class 3 material, Class 8 liquids, and Division 4.1, 4.2, 4.3, 5.1 or 5.2 materials.
- (d) Except as otherwise provided in this subchapter, hazardous materials must be stored, loaded or transported in accordance with the following table and other provisions of this section:

| SEGREGATION TABLE FOR HAZARDOUS MATERIALS | | | | | | | | | | | | | Water of respond | | | | | | |
|---|-----------|-----|----|-----|-----|-----|-----|-----|--------------------------|--------------------------|---|-----|------------------|-----|--|-----|-------------------------------------|---|---|
| Class or Division | Not es | 1.1 | 3 | 1.4 | 1.5 | 1.6 | 2.1 | 2.2 | 2.3 Gas Zon e A | 2.3 Gas Zon e B | 3 | 4.1 | 4.2 | 4.3 | 50 | 5.2 | 6.1 Liquid s PGI Zone A | 7 | 8 Liquid s only |
| Explosives - 1.1 / 1.2 | Α | * | * | * | * | * | X | Х | X | X | X | X | X | X | X | X | X | X | Χ |
| Explosives - 1.3 | | * | * | * | * | * | X | | X | X | X | | X | Х | X | X | Х | | Χ |
| Explosives - 1.4 | | 530 | ,. | ÷ | * | 91 | 0 | | 0 | 0 | 0 | | 0 | | | | 0 | | 0 |
| Very Insensitive Explosives - 1.5 | Α | 7: | 72 | yir | şt. | * | Х | Х | X | Х | X | Х | Х | Χ | X | Х | X | X | Х |
| Extremely Insensitive Explosives - 1.6 | | * | * | * | * | * | | | | | | | | | THE PART WHITE A P | | | | |
| Flammable Gases - 2.1 | | Х | X | 0 | Х | | | | Х | 0 | | | | | A | | 0 | O | *************************************** |
| Non-Toxic, Non- Flammable gases - 2.2 | | Х | | | Х | | | | | | | | | | | | | | |
| Poisonous Gas Zone A - 2.3 | | Х | Х | 0 | Х | | Х | | | | Х | Х | Х | Х | Х | Х | | | Х |

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Segregation Table of Hazardous Materials

| | , , | • | | | | | | | | | | | | | | | |
|---|-----|---|---|---|---|--|---|---|---|---|---|---|---|--|---|---|---|
| Poisonous Gas Zone B - 2.3 | | Х | Х | 0 | Х | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| Flammable Liquids - 3 | | X | X | 0 | Х | | | X | 0 | | | | | 0 | | Х | |
| Flammable Solids - 4.1 | | X | | | X | | [| X | 0 | | | | | | | X | 0 |
| Spontaneously Combustible Materials - 4.2 | | X | X | 0 | X | THE REAL PROPERTY OF THE PROPE | | Х | 0 | - | | | | AND DESCRIPTION OF THE PROPERTY OF THE PROPERT | | Х | Х |
| Dangerous When Wet Materials - 4.3 | | Х | Х | | X | | | Х | 0 | | | | | | | Х | 0 |
| Oxidizers - 5.1 | Α | X | X | | X | | | X | 0 | 0 | | | | | | X | 0 |
| Organic Peroxides - 5.2 | | X | Χ | | X | | | Х | 0 | Γ | | | | | | Χ | 0 |
| Poisonous Liquids PGI Zone A - 6.1 | | Х | X | 0 | X | | 0 | | | X | X | X | X | X | X | | Х |
| Radioactive Materials - 7 | | X | | | Χ | | 0 | *************************************** | | | | | | | | | |
| Corrosive Liquids - 8 | | X | X | 0 | Х | | | X | 0 | | 0 | X | 0 | 0 | 0 | Х | |

- (e) instructions for using the segregation table for hazardous materials are as follows:
- (1) The absence of any hazard class or division or a blank space in the table indicates that no restrictions apply.
- (2) The letter "X" in the table indicates that these materials may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation.
- (3) The letter "O" in the table indicates that these materials may not be loaded, transported, or stored together in the same transport vehicle or storage facility during the course of transportation unless separated in a manner that, in the event of leakage from packages under conditions normally incident to transportation, commingling of hazardous materials would not occur. Notwithstanding the methods of separation employed, Class 8 (corrosive) liquids may not be loaded above or adjacent to Class 4 (flammable) or Class 5 (oxidizing) materials; except that shippers may load truckload shipments of such materials together when it is known that the mixture of contents would not cause a fire or a dangerous evolution of heat or gas.
- (4) The "*" in the table indicates that segregation among different Class 1 (explosive) materials is governed by the compatibility table in paragraph (f) of this section.
- (5) The note "A" in the second column of the table means that, notwithstanding the requirements of the letter "X", ammonium nitrate (UN1942) and ammonium nitrate fertilizer may be loaded or stored with Division 1.1 (explosive) or Division 1.5 materials, unless otherwise prohibited by §177.835(c).
- (6) When the §172.101 table or §172.402 of this subchapter requires a package to bear a subsidiary hazard label, segregation appropriate to the subsidiary hazard must be applied when that segregation is more restrictive than that required by the primary hazard. However, hazardous materials of the same class may be stowed together without regard to segregation required for any secondary hazard if the materials are not capable of reacting dangerously with each other and causing combustion or dangerous evolution of heat, evolution of flammable, poisonous, or asphyxiant gases, or formation of corrosive or unstable materials.