

U.S. Fire Administration / National Fire Academy

*Coffee Break Training***Topic: Explosive Storage in Magazines**

Learning objective: The student shall be able to identify the limitations on explosive storage in magazines based on UN/DOT Division classifications.

The past few weeks Coffee Break Training has explored requirements related to explosive magazines and explosive storage. This week, we describe where explosives, explosive materials, and pyrotechnic devices (fireworks) must be stored.

Explosive materials are classified by the U.S. Department of Transportation (DOT) in accordance with Title 18 United States Code, *Importation, Manufacture, Distribution and Storage of Explosive Materials* and the hazardous materials regulations of Title 49 of the Code of Federal Regulations. The materials are assigned a United Nations/DOT “Division” number based on their relative hazards.

Magazines are categorized by “types” depending upon their construction, features, use, location, and the type of explosive materials they will contain. Magazines must be constructed in accordance with the requirements of NFPA 495, *Explosive Materials Code*; NFPA 1124, *Code for the Manufacture, Transportation, Storage, and Retail Sale of Fireworks and Pyrotechnic Articles*; or U.S. Department of Treasury 27 CFR 55, *Commerce in Explosives*.

The division numbers and their storage requirements are summarized in the following table. An “X” in the cell means that the explosive division must be stored in that magazine type.



Division 1.4 pyrotechnics stored in a Type 3 magazine.

UN/DOT DIVISION	MAGAZINE TYPE REQUIRED				
	1	2	3	4	5
1.1	X	X	X	--	--
1.2	X	X	X	--	--
1.3	X	X	X	X	--
1.4	X	X	X	X	--
1.5	X	X	X	X	X
1.6	X	X	X	X	X

For additional information, refer to *International Fire Code*[®], Chapter 3; or *NFPA 1, Uniform Fire Code*[™], Chapter 65.