

U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Outdoor Liquid Container Storage: Mixed Liquid Piles

Learning objective: The student shall be able to explain the limitations of mixing liquid classes in outdoor flammable and combustible liquid container storage.

The fire code language regarding storage piles of mixed class flammable liquids can be confusing:

“Where two or more classes of liquids are stored in a single pile, the quantity of the pile shall not exceed the smallest of maximum quantities for the classes of material stored.”

To correctly apply this requirement, you must refer to the outdoor container storage requirement table of your code.

Liquid Class	Maximum Gallons per Pile	Distance Between Piles (feet)	Distance to Property Line That Is or Can be Built Upon (feet)	Distance to Street, Alley or Public Way (feet)
I-A	1,100	5	50	10
I-B	2,200	5	50	10
I-C	4,400	5	50	10
II	8,800	5	25	5
III	22,000	5	10	5

What maximum amount of gallons could be stored in a mixed-class pile containing Class I-A, I-C and III liquids? By referring to this table, the “smallest of the maximum quantities” is 1,100 gallons for Class I-A, so the maximum pile size for this scenario is 1,100 gallons of mixed Class I-A, I-C and III liquids.



For additional information, refer to NFPA 1, Uniform Fire Code™, Chapter 66; International Fire Code®, Chapter 34; or NFPA 30, Flammable and Combustible Liquids Code.