2009 *International Fire Code* (IFC) – Table 2703.1.1(1) – Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard[a, j, m, n, p]

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE[b]			USE-CLOSED SYSTEMS[b]			USE-OPEN SYSTEMS[b]	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible liquid[c, i]	II IIIA IIIB	H-2 or H-3 H-2 or H-3 Not Applicable	Not Applicable	120[d, e] 330[d, e] 13,200[e, f]	Not Applicable	Not Applicable	120[d] 330[d] 13,200[f]	Not Applicable	Not Applicable	30[d] 80[d] 3,300[f]
Combustible fiber	Loose Baled[o]	H-3	(100) (1,000)	Not Applicable	Not Applicable	(100) (1,000)	Not Applicable	Not Applicable	(20) (200)	Not Applicable
Cryogenic Flammable	Not Applicable	H-2	Not Applicable	45[d]	Not Applicable	Not Applicable	45[d]	Not Applicable	Not Applicable	10[d]
Consumer fireworks (Class C Common)	1.4G	H-3	125[d, e, l]	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Cryogenic Oxidizing	Not Applicable	H-3	Not Applicable	45[d]	Not Applicable	Not Applicable	45[d]	Not Applicable	Not Applicable	10[d]
Explosives	Division 1.1 Division 1.2 Division 1.3 Division 1.4 Division 1.4G Division 1.5 Division 1.6	H-1 H-1 H-1 or H-2 H-3 H-3 H-1 H-1	1[e, g] 1[e, g] 5[e, g] 50[e, g] 125[d, e, l] 1[e, g] 1[d, e, g]	(1)[e, g] (1)[e, g] (5)[e, g] (50)[e, g] Not Applicable (1)[e, g] Not Applicable	Not Applicable	0.25[g] 0.25[g] 1[g] 50[g] Not Applicable 0.25[g] Not Applicable	(0.25)[g] (0.25)[g] (1)[g] (50)[g] Not Applicable (0.25)[g] Not Applicable	Not Applicable	0.25[g] 0.25[g] 1[g] Not Applicable Not Applicable 0.25[g] Not Applicable	(0.25)[g] (0.25)[g] (1)[g] Not Applicable Not Applicable (0.25)[g] Not Applicable
Flammable gas	Gaseous Liquefied	H-2	Not Applicable	Not Applicable 30[d, e]	1,000[d, e] Not Applicable	Not Applicable	Not Applicable 30[d, e]	1,000[d, e] Not Applicable	Not Applicable	Not Applicable
Flammable liquids[c]	IA . IB and IC	H-2 or H-3	Not Applicable	30[d, e] . 120[d, e]	Not Applicable	Not Applicable	30[d] . 120[d]	Not Applicable	Not Applicable	10[d] . 30[d]
Combination Flammable liquid (IA, IB, IC)	Not Applicable	H-2 or H-3	Not Applicable	120[d, e, h]	Not Applicable	Not Applicable	120[d, h]	Not Applicable	Not Applicable	30[d, h]
Flammable solid	Not Applicable	H-3	125[d, e]	Not Applicable	Not Applicable	125[d]	Not Applicable	Not Applicable	25[d]	Not Applicable

Organic peroxide	UD I II III IV V	H-1 H-2 H-3 H-3 Not Applicable Not Applicable	1[e, g] 5[d, e] 50[d, e] 125[d, e] Not Limited Not Limited	(1)[e, g] (5)[d, e] (50)[d, e] (125)[d, e] Not Limited Not Limited	Not Applicable	0.25[g] 1[d] 50[d] 125[d] Not Limited Not Limited	(0.25)[g] (1)[d] (50)[d] (125)[d] Not Limited Not Limited	Not Applicable	0.25[g] 1[d] 10[d] 25[d] Not Limited Not Limited	(0.25)[g] (1)[d] (10)[d] (25)[d] Not Limited Not Limited
Oxidizer	4 3[k] 2 1	H-1 H-2 or H-3 H-3 Not Applicable	1[g] 10[d, e] 250[d, e] 4,000[e, f]	(1)[e, g] (10)[d, e] (250)[d, e] (4,000)[e, f]	Not Applicable	0.25[g] 2[d] 250[d] 4,000[f]	(0.25)[g] (2)[d] (250)[d] (4,000)[f]	Not Applicable	0.25[g] 2[d] 50[d] 1,000[f]	(0.25)[g] (2)[d] (50)[d] (1,000)[f]
Oxidizing gas	Gaseous Liquefied	H-3	Not Applicable	Not Applicable 15[d, e]	1,500[d, e] Not Applicable	Not Applicable	Not Applicable 15[d, e]	1,500[d, e] Not Applicable	Not Applicable	Not Applicable
Pyrophoric	Not Applicable	H-2	4[e, g]	(4)[e, g]	50[e, g]	1[g]	(1)[g]	10[e, g]	0	0
Unstable (reactive)	4 3 2 1	H-1 H-1 or H-2 H-3 Not Applicable	1[e, g] 5[d, e] 50[d, e] Not Limited	(1)[e, g] (5)[d, e] (50)[d, e] Not Limited	10[e, g] 50[d, e] 250[d, e] Not Limited	0.25[g] 1[d] 50[d] Not Limited	(0.25)[g] (1)[d] (50)[d] Not Limited	2[e, g] 10[d, e] 250[d, e] Not Limited	0.25[g] 1[d] 10[d] Not Limited	(0.25)[g] (1)[d] (10)[d] Not Limited
Water reactive	3 2 1	H-2 H-3 Not Applicable	5[d, e] 50[d, e] Not Limited	(5)[d, e] (50)[d, e] Not Limited	Not Applicable	5[d] 50[d] Not Limited	(5)[d] (50)[d] Not Limited	Not Applicable	1[d] 10[d] Not Limited	(1)[d] (10)[d] Not Limited

For SI: 1 cubic foot = 0.02832 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

a. For use of control areas, see Section 2703.8.3.
b. The aggregate quantity in use and storage is not to exceed the quantity listed for storage.
c. The quantities of alcoholic beverages in retail and wholesale sales occupancies is not to be limited providing the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs, consumer or industrial products, and cosmetics containing not more then 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable are not to be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
d. Maximum allowable quantities are to be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system. Where Note e also applies, the increase for both notes is to be applied accumulatively.
e. Maximum allowable quantities are to be increased 100 percent when stored in approved storage cabinets, day boxes, gas cabinets, exhausted enclosures or safety cans. Where Note d also applies, the increase for both notes is to be applied accumulatively.
f. Quantities are not to be limited in a building equipped throughout with an approved automatic sprinkler system.
g. Allowed only in buildings equipped throughout with an approved automatic sprinkler system.
h. Containing not more than the maximum allowable quantity per control area of Class IA, Class IB or Class IC flammable liquids.
i. Inside a building, the maximum capacity of a combustible liquid storage system that is connected to a fuel-oil piping system is to be 660 gallons provided such system complies with this code.
j. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
k. A maximum quantity of 200 pounds of solid or 20 gallons of liquid Class 3 oxidizers is allowed when such materials are necessary for maintenance purposes, operation or sanitation of equipment when the storage containers and the manner of storage are approved.

l. Net weight of pyrotechnic composition of the fireworks. Where the net weight of the pyrotechnic composition of the fireworks is not known, 25 percent of the gross weight of the fireworks including packaging is to be used.
m. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 2703.1.2.
n. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 2703.11, see Table 2703.11.1.
o. Densely-packed baled cotton that complies with the packaging requirements of ISO 8115 is not to be included in this material class.
p. The following are not to be included in determining the maximum allowable quantities:
    1. Liquid or gaseous fuel in fuel tanks of vehicles.
    2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with this code.
    3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code.*
    4. Liquid fuels in piping systems and fixed appliances, regulated by the *International Mechanical Code.*

2009 *International Fire Code* (IFC) – Table 2703.1.1(2) – Maximum Allowable Quantity per Control Area of Hazardous Material Posing a Health Hazard[a, b, c, j]

	STORAGE[d]			USE-CLOSED SYSTEMS[d]			USE-OPEN SYSTEMS[d]	
MATERIAL	Solid pounds[e, f]	Liquid gallons (pounds)[e, f]	Gas cubic feet at NTP[e]	Solid pounds[e]	Liquid gallons (pounds)[e]	Gas cubic feet at NTP[e]	Solid pounds[e]	Liquid gallons (pounds)[e]
Corrosive	5,000	500	810[f, g]	5,000	500	810[f, g]	1,000	100
Highly toxic	10	(10)[i]	20[h]	10	(10)[i]	20[h]	3	(3)[i]
Toxic	500	(500)[i]	810[f]	500	(500)[i]	810[f]	125	(125)[i]

For SI: 1 cubic foot = 0.02832 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.
a. For use of control areas, see Section 2703.8.3.
b. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs consumer or industrial products, and cosmetics, containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solution not being flammable, are not to be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
c. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 2703.11, see Table 2703.11.1.
d. The aggregate quantity in use and storage is not to exceed the quantity listed for storage.
e. Maximum allowable quantities are to be increase 100 percent in buildings equipped throughout with an approved automatic sprinkler system. Where Note f also applies, the increase for both notes is to be applied accumulatively.
f. Maximum allowable quantities are to be increased 100 percent when stored in approved storage cabinets, gas cabinets, or exhausted enclosures. Where Note e also applies, the increase for both notes is to be applied accumulatively.
g. A single cylinder containing 150 pounds or less of anhydrous ammonia in a single control area in a nonsprinklered building is to be considered a maximum allowable quantity. Two cylinders, each containing 150 pounds or less in a single control area are to be considered a maximum allowable quantity provided the building is equipped throughout with an approved automatic sprinkler system.
h. Allowed only when stored in approved exhausted gas cabinets or exhausted enclosures.
i. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
j. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 2703.1.2.

2009 *International Fire Code* (IFC) – Table 2703.1.1(3) – Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard in an Outdoor Control Area[a, b, c]

MATERIAL	CLASS	STORAGE[b]			USE-CLOSED SYSTEMS[b]			USE-OPEN SYSTEMS[b]	
		Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds	Liquid gallons (pounds)
Flammable gas	Gaseous Liquefied	Not Applicable	Not Applicable 30	3,000 Not Applicable	Not Applicable	Not Applicable 15	1,500 Not Applicable	Not Applicable	Not Applicable
Flammable solid	Not Applicable	500	Not Applicable	Not Applicable	250	Not Applicable	Not Applicable	50	Not Applicable
Organic peroxide	Unclassified Detonable	1	(1)	Not Applicable	0.25	(0.25)[d]	Not Applicable	0.25	(0.25)[d]
Organic peroxide	I II III IV V	20 200 500 1,000 Not Limited	(20)[d] (200)[d] (500)[d] (1,000)[d] Not Limited	Not Applicable	10 100 250 500 Not Limited	(10)[d] (100)[d] (250)[d] (500)[d] Not Limited	Not Applicable	2 20 50 100 Not Limited	(2)[d] (20)[d] (50)[d] (100)[d] Not Limited
Oxidizer	4 3 2 1	2 40 1,000 Not Limited	(2)[d] (40)[d] (1,000)[d] Not Limited	Not Applicable	1 20 500 Not Limited	(1)[d] (20)[d] (500)[d] Not Limited	Not Applicable	0.25 4 100 Not Limited	(0.25)[d] (4)[d] (100)[d] Not Limited
Oxidizing gas	Gaseous Liquefied	Not Applicable	Not Applicable 60	6,000 Not Applicable	Not Applicable	Not Applicable 30	3,000 Not Applicable	Not Applicable	Not Applicable
Pyrophoric materials	Not Applicable	8	(8)[d]	100	4	(4)[d]	10	0	0
Unstable (reactive)	4 3 2 1	2 20 200 Not Limited	(2)[d] (20)[d] (200)[d] Not Limited	20 200 1,000 1,500	1 10 100 Not Limited	(1)[d] (10)[d] (100)[d] Not Limited	2 10 250 Not Limited	0.25 1 10 Not Limited	(0.25)[d] 1 10 Not Limited
Water reactive	3 2 1	20 200 Not Limited	(20)[d] (200)[d] Not Limited	Not Applicable	10 100 Not Limited	(10)[d] (100)[d] Not Limited	Not Applicable	1 10 Not Limited	(1)[d] (10)[d] Not Limited

For SI: 1 cubic foot = 0.02832 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

a. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 2703.1.2.

b. The aggregate quantities in storage and use are not to exceed the quantity listed for storage.

c. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials allowed in outdoor storage per single property under the same ownership or control used for retail or wholesale sales is allowed to exceed the maximum allowable quantity per control area when such storage is in accordance with Section 2703.11.

d. Quantities in parentheses indicate quantity units in parentheses at the head of each column.

2009 *International Fire Code* (IFC) – Table 2703.1.1(4) – Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Health Hazard in an Outdoor Control Area[a, b, c]

MATERIAL	STORAGE			USE-CLOSED SYSTEMS			USE-OPEN SYSTEMS	
	Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds	Liquid gallons (pounds)
Corrosives	20,000	2,000	1,620[g]	10,000	1,000	810[g]	1,000	100
Highly toxics	20	(20)[f]	40[d]	10	(10)[f]	20[d]	3	(3)[f]
Toxics	1,000	(1,000)[e, f]	1,620	500	50[e]	810	25	(25)[e, f]

For SI: 1 cubic foot = 0.02832 m^3, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

a. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 2703.1.2.
b. The aggregate quantities in storage and use are not to exceed the quantity listed for storage.
c. The aggregate quantity of nonflammable solid and nonflammable or noncombustible liquid hazardous materials allowed in outdoor storage per single property under the same ownership or control used for retail or wholesale sales is allowed to exceed the maximum allowable quantity per control area when such storage is in accordance with Section 2703.11.
d. Allowed only when used in approved exhausted gas cabinets, exhausted enclosures or under fume hoods.
e. The maximum allowable quantity per control area for toxic liquids with vapor pressures in excess of 1 psia at 77°F is to be the maximum allowable quantity per control area listed for highly toxic liquids.
f. Quantities in parentheses indicated quantity units in parentheses at the head of each column.
g. Two cylinders, each cylinder containing 150 pounds or less of anhydrous ammonia, is to be considered a maximum allowable quantity in an outdoor control area.