

**5003.1.1 Maximum allowable quantity per control area.**

The *maximum allowable quantity per control area* shall be as specified in Tables 5003.1.1(1) through 5003.1.1(4).

For retail and wholesale storage and display in Group M occupancies and Group S storage, see Section 5003.11.

**TABLE 5003.1.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD<sup>a, j, m, n, p</sup>**

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>	
			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 dust	NA	H-2	See Note q	NA	NA	See Note q	NA	NA	See Note q	NA
Combustible fibers <sup>q</sup>	Loose Baled <sup>o</sup>	H-3	(100) (1,000)	NA	NA	(100) (1,000)	NA	NA	(20) (200)	NA
Combustible liquid <sup>c, i</sup>	II IIIA IIIB	H-2 or H-3 H-2 or H-3 NA	NA	120 <sup>d, e</sup> 330 <sup>d, e</sup> 13,200 <sup>e, f</sup>	NA	NA	120 <sup>d</sup> 330 <sup>d</sup> 13,200 <sup>f</sup>	NA	NA	30 <sup>d</sup> 80 <sup>d</sup> 3,300 <sup>f</sup>
Consumer fireworks	1.4G	H-3	125 <sup>e, l</sup>	NA	NA	NA	NA	NA	NA	NA
Cryogenic Flammable	NA	H-2	NA	45 <sup>d</sup>	NA	NA	45 <sup>d</sup>	NA	NA	10 <sup>d</sup>
Cryogenic Inert	NA	NA	NA	NA	NL	NA	NA	NL	NA	NA
Cryogenic Oxidizing	NA	H-3	NA	45 <sup>d</sup>	NA	NA	45 <sup>d</sup>	NA	NA	10 <sup>d</sup>
Explosives	Division 1.1	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	Division 1.2	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	Division 1.3	H-1 or H-2	5 <sup>e, g</sup>	(5) <sup>e, g</sup>		1 <sup>g</sup>	(1) <sup>g</sup>		1 <sup>g</sup>	(1) <sup>g</sup>
	Division 1.4	H-3	50 <sup>e, g</sup>	(50) <sup>e, g</sup>		50 <sup>g</sup>	(50) <sup>g</sup>		NA	NA
	Division 1.4G	H-3	125 <sup>d, e, l</sup>	NA		NA	NA		NA	NA
	Division 1.5	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
Division 1.6	H-1	1 <sup>e, g</sup>	NA	NA	NA	NA	NA			
Flammable gas	Gaseous Liquefied	H-2	NA	NA (150) <sup>d, e</sup>	1,000 <sup>d, e</sup> NA	NA	NA (150) <sup>d, e</sup> 1,000 <sup>d, e</sup> NA	NA	NA	
Flammable liquid <sup>c</sup>	IA IB and IC	H-2 or H-3	NA	30 <sup>d, e</sup> 120 <sup>d, e</sup>	NA	NA	30 <sup>d</sup> 120 <sup>d</sup>	NA	NA	10 <sup>d</sup> 30 <sup>d</sup>
Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	NA	120 <sup>d, e, h</sup>	NA	NA	120 <sup>d, h</sup>	NA	NA	30 <sup>d, h</sup>
Flammable solid	NA	H-3	125 <sup>d, e</sup>	NA	NA	125 <sup>d</sup>	NA	NA	25 <sup>d</sup>	NA

**TABLE 5003.1.1(1)—continued MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD<sup>a, j, m, n, p</sup>**

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>	
			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)
Inert Gas	Gaseous Liquefied	NA NA	NA NA	NA NA	NL NL	NA NA	NA NA	NL NL	NA NA	NA NA
Organic peroxide	UD	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	I	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>		1 <sup>d</sup>	(1) <sup>d</sup>		1 <sup>d</sup>	(1) <sup>d</sup>
	II	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>	NA	50 <sup>d</sup>	(50) <sup>d</sup>	NA	10 <sup>d</sup>	(10) <sup>d</sup>
	III	H-3	125 <sup>d, e</sup>	(125) <sup>d, e</sup>		125 <sup>d</sup>	(125) <sup>d</sup>		25 <sup>d</sup>	(25) <sup>d</sup>
	IV V	NA NA	NL NL	NL NL		NL NL	NL NL		NL NL	NL NL
Oxidizer	4	H-1	1 <sup>g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	3 <sup>k</sup>	H-2 or H-3	10 <sup>d, e</sup>	(10) <sup>d, e</sup>		2 <sup>d</sup>	(2) <sup>d</sup>	NA	2 <sup>d</sup>	(2) <sup>d</sup>
	2	H-3	250 <sup>d, e</sup>	(250) <sup>d, e</sup>		250 <sup>d</sup>	(250) <sup>d</sup>		50 <sup>d</sup>	(50) <sup>d</sup>
	1	NA	4,000 <sup>e, f</sup>	(4,000) <sup>e, f</sup>		4,000 <sup>f</sup>	(4,000) <sup>f</sup>		1,000 <sup>f</sup>	(1,000) <sup>f</sup>
Oxidizing gas	Gaseous Liquefied	H-3	NA	NA (150) <sup>d, e</sup>	1,500 <sup>d, e</sup> NA	NA	NA (150) <sup>d, e</sup>	1,500 <sup>d, e</sup> NA	NA	NA
Pyrophoric	NA	H-2	4 <sup>e, g</sup>	(4) <sup>e, g</sup>	50 <sup>e, g</sup>	1 <sup>g</sup>	(1) <sup>g</sup>	10 <sup>e, g</sup>	0	0
Unstable (reactive)	4	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	10 <sup>e, g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	2 <sup>e, g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	3	H-1 or H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>	50 <sup>d, e</sup>	1 <sup>d</sup>	(1) <sup>d</sup>	10 <sup>d, e</sup>	1 <sup>d</sup>	(1) <sup>d</sup>
	2	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>	750 <sup>d, e</sup>	50 <sup>d</sup>	(50) <sup>d</sup>	750 <sup>d, e</sup>	10 <sup>d</sup>	(10) <sup>d</sup>
	1	NA	NL	NL	NL	NL	NL	NL	NL	NL
Water reactive	3	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>		5 <sup>d</sup>	(5) <sup>d</sup>		1 <sup>d</sup>	(1) <sup>d</sup>
	2	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>	NA	50 <sup>d</sup>	(50) <sup>d</sup>	NA	10 <sup>d</sup>	(10) <sup>d</sup>
	1	NA	NL	NL		NL	NL		NL	NL

For Sl: 1 cubic foot = 0.02832 m<sup>3</sup>, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

NA = Not Applicable, NL = Not Limited, UD = Unclassified Detonable.

a. For use of control areas, see Section 5003.8.3.

b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.

c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not 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, foodstuff or consumer products and cosmetics containing not more than 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.

d. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.

e. Maximum allowable quantities shall be increased 100 percent where stored in approved storage cabinets, day boxes, gas cabinets, gas rooms, exhausted enclosures or in listed safety cans in accordance with Section 5003.9.10. Where Note d also applies, the increase for both notes shall be applied accumulatively.

f. Quantities shall not be limited in a building equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1.

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. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 603.3.2.

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 where such materials are necessary for maintenance purposes, operation or sanitation of equipment where 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 shall be used.

m. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2.

n. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 5003.11, see Table 5003.11.1.

o. Densely-packed baled cotton that complies with the packing requirements of ISO 8115 shall not be included in this material class.

p. The following shall not be included in determining the maximum allowable quantities:

1. Liquid or gaseous fuel in fuel tanks on 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*.
5. Alcohol-based hand rubs classified as Class I or II liquids in dispensers that are installed in accordance with Sections 5705.5 and 5705.5.1. The location of the alcohol-based hand rub (ABHR) dispensers shall be provided in the construction documents.

q. Where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 104.7.2.

