

TABLE 5003.1.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD<sup>a, i, 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)	See Note q
Combustible dust	NA	H-2	See Note q	NA	NA	NA	See Note q	NA	NA	See Note q	NA
Combustible fibers <sup>d</sup>	Loose Baled <sup>p</sup>	H-3	(100) (1,000)	NA	NA	NA	(100) (1,000)	NA	NA	(20) (200)	NA
Combustible liquid <sup>c, i</sup>	II III A III B	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	NA	NA	120 <sup>d</sup> 330 <sup>d</sup> 13,200 <sup>f</sup>	NA	30 <sup>d</sup> 80 <sup>d</sup> 3,300 <sup>f</sup>
Cryogenic Flammable	NA	H-2	NA	45 <sup>d</sup>	NA	NA	NA	45 <sup>d</sup>	NA	NA	10 <sup>d</sup>
Cryogenic Inert	NA	NA	NA	NA	NL	NL	NA	NA	NA	NA	NA
Cryogenic Oxidizing	NA	H-3	NA	45 <sup>d</sup>	NA	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	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	(0.25) <sup>g</sup>	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>	NA	NA	0.25 <sup>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	10 <sup>e, g</sup>	(10) <sup>e, g</sup>	NA	NA	1 <sup>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>	NA	NA	50 <sup>g</sup>	(50) <sup>g</sup>	50 <sup>g</sup>	50 <sup>g</sup>	NA
	Division 1.4G	H-3	125 <sup>e, 1</sup>	NA	NA	NA	NA	NA	NA	NA	NA
	Division 1.5	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	NA	NA	0.25 <sup>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	NA	NA	NA	NA
Flammable gas	Gaseous Liquefied	H-2	NA	NA	1,000 <sup>d, e</sup> NA	1,000 <sup>d, e</sup> NA	NA	NA	NA	1,000 <sup>d, e</sup> NA	NA
Flammable liquid <sup>c</sup>	IA	H-2 or H-3	NA	30 <sup>d, e</sup>	NA	NA	NA	NA	30 <sup>d</sup>	NA	10 <sup>d</sup>
	IB and IC	H-3	NA	120 <sup>d, e</sup>	NA	NA	NA	NA	120 <sup>d</sup>	NA	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	NA	NA	120 <sup>d, h</sup>	NA	30 <sup>d, h</sup>
	NA	H-3	125 <sup>d, e</sup>	NA	NA	NA	125 <sup>d</sup>	NA	NA	25 <sup>d</sup>	NA

(continued)

HAZARDOUS MATERIALS—GENERAL PROVISIONS

TABLE 5003.1.1(1)—continued  
 MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD<sup>a, i, 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)	Gas (cubic feet at NTP)
Inert Gas	Gaseous Liquefied	NA	NA	NA	NL	NA	NA	NA	NA	NL	NA
		NA	NA	NA	NA	NA	NL	NA	NA	NL	NA
Organic peroxide	UD	H-1	1 <sup>c, g</sup>	(1) <sup>c, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	(0.25) <sup>g</sup>
	I	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>	NA	1 <sup>d</sup>	(1) <sup>d</sup>	1 <sup>d</sup>	(1) <sup>d</sup>	NA	(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>	10 <sup>d</sup>	(10) <sup>d</sup>	NA	(10) <sup>d</sup>
	III	H-3	125 <sup>d, e</sup>	(125) <sup>d, e</sup>	NA	125 <sup>d</sup>	(125) <sup>d</sup>	25 <sup>d</sup>	(25) <sup>d</sup>	NA	(25) <sup>d</sup>
	IV	NA	NL	NL	NA	NL	NL	NL	NL	NA	NL
V	NA	NL	NL	NA	NL	NL	NL	NL	NA	NL	
Oxidizer	4	H-1	1 <sup>g</sup>	(1) <sup>c, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	(0.25) <sup>g</sup>
	3 <sup>k</sup>	H-2 or H-3	10 <sup>d, e</sup>	(10) <sup>d, e</sup>	NA	2 <sup>d</sup>	(2) <sup>d</sup>	2 <sup>d</sup>	(2) <sup>d</sup>	NA	(2) <sup>d</sup>
	2	H-3	250 <sup>d, e</sup>	(250) <sup>d, e</sup>	NA	250 <sup>d</sup>	(250) <sup>d</sup>	50 <sup>d</sup>	(50) <sup>d</sup>	NA	(50) <sup>d</sup>
Oxidizing gas	Gaseous	H-3	NA	NA	1,500 <sup>d, e</sup>	NA	NA	NA	NA	1,500 <sup>d, e</sup>	NA
	Liquefied	H-3	NA	(150) <sup>d, e</sup>	NA	NA	(150) <sup>d, e</sup>	NA	NA	NA	NA
Pyrophoric	NA	H-2	4 <sup>c, g</sup>	(4) <sup>c, g</sup>	50 <sup>c, g</sup>	1 <sup>g</sup>	(1) <sup>g</sup>	0	0	10 <sup>c, g</sup>	0
	4	H-1	1 <sup>c, g</sup>	(1) <sup>c, g</sup>	10 <sup>c, g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	2 <sup>c, g</sup>	(0.25) <sup>g</sup>
Unstable (reactive)	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>	1 <sup>d</sup>	(1) <sup>d</sup>	10 <sup>d, e</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>	10 <sup>d</sup>	(10) <sup>d</sup>	750 <sup>d, e</sup>	(10) <sup>d</sup>
	1	NA	NL	NL	NL	NL	NL	NL	NL	NL	NL
Water reactive	3	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>	NA	5 <sup>d</sup>	(5) <sup>d</sup>	1 <sup>d</sup>	(1) <sup>d</sup>	NA	(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>	10 <sup>d</sup>	(10) <sup>d</sup>	NA	(10) <sup>d</sup>
	1	NA	NL	NL	NA	NL	NL	NL	NL	NA	NL

For SI: 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. [SFM] In other than Group L occupancies, maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied cumulatively. For Group L occupancies, refer to California Building Code Table 453.2.1 for approved cabinets.

(footnotes continued)

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

- 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 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 220 pounds of solid or 22 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 5003.1.1, see Table 5003.1.1.1.
- 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 *California Fuel Gas Code*.
  4. Liquid fuels in piping systems and fixed appliances regulated by the *California 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.

## HAZARDOUS MATERIALS—GENERAL PROVISIONS

TABLE 5003.1.1(2)  
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A HEALTH HAZARD<sup>a, c, f, h, i</sup>

MATERIAL	STORAGE <sup>b</sup>		USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>		
	Solid pounds <sup>d, e</sup>	Liquid gallons (pounds) <sup>d, e</sup>	Gas cubic feet at NTP (pounds) <sup>d</sup>	Solid pounds <sup>d</sup>	Liquid gallons (pounds) <sup>d</sup>	Gas cubic feet at NTP (pounds) <sup>d</sup>	Solid pounds <sup>d</sup>	Liquid gallons (pounds) <sup>d</sup>
Corrosives	5,000	500	Gaseous 810 <sup>e</sup> Liquefied (150)	5,000	500	Gaseous 810 <sup>e</sup> Liquefied (150)	1,000	100
Highly Toxics	10	(10)	Gaseous 20 <sup>g</sup> Liquefied (4) <sup>g</sup>	10	(10)	Gaseous 20 <sup>g</sup> Liquefied (4) <sup>g</sup>	3	(3)
Toxics	500	(500)	Gaseous 810 <sup>e</sup> Liquefied (150) <sup>e</sup>	500	(500)	Gaseous 810 <sup>e</sup> Liquefied (150) <sup>e</sup>	125	(125)

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

- For use of control areas, see Section 5003.8.3.
- The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
- 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 and 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.
- [SEMI In other than Group L occupancies, maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied cumulatively. For Group L occupancies, refer to California Building Code Table 453.7.2.1 for approved cabinets.]*
- Maximum allowable quantities shall be increased 100 percent where stored in approved storage cabinets, gas cabinets or exhausted enclosures. Where Note d applies, the increase for both notes shall be applied cumulatively.
- 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.
- Allowed only where stored in approved exhausted gas cabinets or exhausted enclosures.
- Quantities in parentheses indicate quantity units in parentheses at the head of each column.
- For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2.

**TABLE 5003.1.1(3)  
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD IN AN OUTDOOR CONTROL AREA<sup>a, b, c, d</sup>**

MATERIAL	CLASS	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>		
		Solid pounds (cubic feet)	Liquid gallons (pounds) <sup>d</sup>	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds) <sup>d</sup>	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds) <sup>d</sup>	
Flammable gas	Gaseous Liquefied	Not Applicable	Not Applicable (300)	3,000 Not Applicable	Not Applicable	Not Applicable (150)	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	
Inert Gas	Gaseous Liquefied	Not Applicable	Not Applicable	Not Limited	Not Applicable	Not Applicable	Not Limited	Not Applicable	Not Applicable	
Cryogenic inert	Not Applicable	Not Applicable	Not Applicable	Not Limited	Not Applicable	Not Applicable	Not Limited	Not Applicable	Not Applicable	
Organic peroxide	Unclassified Detonable	1	(1)	Not Applicable	0.25	(0.25)	Not Applicable	0.25	(0.25)	
Organic peroxide	I	20	(20)	Not Applicable	10	(10)	Not Applicable	2	(2)	
	II	200	(200)		100	(100)		20	(20)	
	III	500	(500)		250	(250)		50	(50)	
	IV	1,000	(1,000)		500	(500)		100	(100)	
	V	Not Limited	Not Limited		Not Limited	Not Limited		Not Limited	Not Limited	
Oxidizer	4	2	(2)	Not Applicable	1	(1)	Not Applicable	0.25	(0.25)	
	3	40	(40)		20	(20)		4	(4)	
	2	1,000	(1,000)		500	(500)		100	(100)	
	1	Not Limited	Not Limited		Not Limited	Not Limited		Not Limited	Not Limited	
Oxidizing gas	Gaseous Liquefied	Not Applicable	Not Applicable (600)	6,000 Not Applicable	Not Applicable	Not Applicable (300)	1,500 Not Applicable	Not Applicable		
Pyrophoric materials	Not Applicable	8	(8)	100	4	(4)	10	0		
Unstable (reactive)	4	2	(2)	Not Applicable	1	(1)	Not Applicable	0.25	(0.25)	
	3	20	(20)		10	(10)		1	(1)	
	2	200	(200)		100	(100)		10	(10)	
	1	Not Limited	Not Limited		Not Limited	Not Limited		Not Limited	Not Limited	
Water reactive	3	20	(20)	Not Applicable	10	(10)	Not Applicable	1	(1)	
	2	200	(200)		100	(100)		10	(10)	
	1	Not Limited	Not Limited		Not Limited	Not Limited		Not Limited	Not Limited	

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

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

b. The aggregate quantities in storage and use shall not 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 where such storage is in accordance with Section 5003.1.1.

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

## HAZARDOUS MATERIALS—GENERAL PROVISIONS

TABLE 5003.1.1(4) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A HEALTH HAZARD IN AN OUTDOOR CONTROL AREA<sup>a, b, c, f</sup>

MATERIAL	STORAGE		USE-CLOSED SYSTEMS			USE-OPEN SYSTEMS		
	Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP (pounds)	Solid pounds	Liquid gallons (pounds)	Gas cubic feet at NTP (pounds)	Solid pounds	Liquid gallons (pounds)
Corrosives	20,000	2,000	Gaseous 1,620 Liquefied (300)	10,000	1,000	Gaseous 810 Liquefied (150)	1,000	100
Highly toxics	20	(20)	Gaseous 40 <sup>d</sup> Liquefied (8) <sup>d</sup>	10	(10)	Gaseous 20 <sup>d</sup> Liquefied (4) <sup>d</sup>	3	(3)
Toxics	1,000	(1,000) <sup>e</sup>	Gaseous 1,620 Liquefied (300)	500	50 <sup>e</sup>	Gaseous 810 Liquefied (150)	125	(125) <sup>e</sup>

For SI: 1 cubic foot = 0.02832 m<sup>3</sup>, 1 pound = 0.454 kg, 1 gallon = 3.785 L, 1 pound per square inch absolute = 6.895 kPa, °C = [(°F) - 32]/1.8.

- For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2.
- The aggregate quantities in storage and use shall not exceed the quantity listed for storage.
- 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 where such storage is in accordance with Section 5003.1.1.
- Allowed only where used in approved exhausted gas cabinets, exhausted enclosures or under fume hoods.
- The maximum allowable quantity per control area for toxic liquids with vapor pressures in excess of 1 psia at 77°F shall be the maximum allowable quantity per control area listed for highly toxic liquids.
- Quantities in parentheses indicate quantity units in parentheses at the head of each column.