



Product Information Sheet

CARBON DIOXIDE



Carbon Dioxide is the trusted non-conductive clean agent and is most effective for dealing with electronic equipment fires. CO₂ is suitable for use on Class B and Class C fires.

TYPICAL USES: For protecting sensitive electronic equipment in offices, classrooms, churches, parking garages, and hotel/motel assembly halls and guest areas. For protecting sensitive electronic equipment in businesses such as retail stores, light manufacturing facilities, research facilities, auto dealerships, vehicle/aircraft/marine service centers, and manufacturing processes such as painting, dipping, and coating.

Not UL Listed or suitable for use on fires involving cooking oil and grease. Recommended for use on sensitive electronic equipment.



LISTED

USCG
Approved

DOT
Compliant

Model	5CD	10CD	15CD	20CD
Pt. #	45100	45600	46100	46600
AGENT CAPACITY	5 lb. (2.27 kg)	10 lb. (4.54 kg)	15 lb. (6.8 kg)	20 lb. (9.07 kg)
UL RATING	5-B:C	10-B:C	10-B:C	10-B:C
DISCHARGE TIME	8 sec	10 sec	15 sec	20 sec
RANGE (FT/M)	4-8 / 1.2-2.4	4-8 / 1.2-2.4	4-8 / 1.2-2.4	4-8 / 1.2-2.4
BRACKET	Wall	Wall	Wall	Wall
USCG APPROVAL	Type B:C Size I	Type B:C Size I	Type B:C Size II	Type B:C Size II
SHIP WEIGHT	13.75 lb. (6.3 kg)	27.75 lb. (12.6 kg)	37.75 lb. (17.1 kg)	49 lb. (22.2 kg)
UNIT HEIGHT	17.375 in (44.1 cm)	19.75 in (50.2 cm)	26.375 in (67 cm)	26.875 in (68.2 cm)
UNIT WIDTH	8.25 in (21 cm)	12 in (30.5 cm)	12 in (30.5 cm)	13 in (33 cm)
UNIT DIAMETER	5.25 in (13.3 cm)	6.89 in (17.5 cm)	6.89 in (17.5 cm)	8 in (20.3 cm)



Fire Ratings

Along with the classification, the numerical rating of an extinguisher is an important factor in the proper selection of an extinguisher. The rating is a measure of the extinguishing potential of the fire extinguisher and is developed on the basis of comparative fire tests.

Only **Class A** and **Class B** classifications carry numerical ratings. Basically the higher the number associated with the classification letter, the larger the fire the extinguisher has the potential to extinguish.

Class A fire tests involve two types of fire, a wood crib fire test and a wood panel fire test. For example to achieve a 3-A rating an extinguisher must successfully extinguish a burning wood crib measuring 29" x 29" x 27" and a wood panel measuring 12' x 12'.

Class B fire tests involve square pans containing flammable liquid.

For example to achieve a 40-B rating an extinguisher must successfully extinguish a burning pan measuring 100 sq. ft.

There are no numerical ratings associated with Class C, D or K.

For Class C, the electrical nonconducting characteristics of the agent are verified, not its extinguishing potential.

For Class D, only the amount of agent and application method needed to control a metal fire of a certain size and type is tested.

For Class K, the extinguisher must extinguish 80 lbs. of burning cooking oil in a commercial deep fat fryer and cause no splashing of flaming oil outside the fryer.

Placement/Accessibility Of Extinguisher

Fire Classification	Class A	Class B	Class C	Class D	Class K
Maximum Travel Distance To Fire Extinguisher	75 Feet Maximum area that one extinguisher can protect and meet the 75 ft. rule = 11,250 sq. ft..	50 Feet Maximum area that one extinguisher can protect and meet the 50 ft. rule = 5,000 sq. ft..	In accordance with the Class A or B hazard it is protecting	75 Feet	30 Feet Maximum area that one extinguisher can protect and meet the 30 ft. rule = 1,800 sq. ft.

Occupancy Hazards

The NFPA classifies occupancies as either Low, Moderate or High Hazard.

Low hazard occupancies are locations where the total amount of Class A combustible materials and Class B flammables, including furnishings, decorations, and contents, is of minor quantity. This can include some buildings or rooms occupied as offices, classrooms, churches, assembly halls, guest room areas of hotels/motels.

Moderate hazard occupancies are locations where the total amount of Class A combustibles and Class B flammables are present in greater amounts than expected under low hazard occupancies.

These occupancies could consist of dining areas, mercantile shops and allied storage, light manufacturing, research operations, auto showrooms, parking garages and workshops.

High hazard occupancies are locations where the total amount of Class A combustibles and Class B flammables present, in storage, production, use, finished product, or combination thereof, is over and above those expected in occupancies classed as moderate hazard.

These occupancies could consist of woodworking; vehicle repair; aircraft and

boat servicing; cooking areas; individual product display showrooms; product convention center displays; and storage and manufacturing processes such as painting, dipping, and coating, including flammable liquid handling.

Occupancies	Min. Rating	Unit of A
Low	2-A:5/10-B	3000
Moderate	2-A:10/20-B	1500
High	4-A:40/80-B	1000

Note: If the lower B rating is installed then the maximum travel distance to the extinguisher is reduced from 50 to 30 feet.

To determine the overall A rating necessary for protection of an occupancy, divide the total sq. ft. by the Unit of A in the above table. For example if a low occupancy building has a total sq. ft. of 30,000. Divide 30,000 x 3000 (Unit of A) = 10.

Therefore in this example the building would require a minimum of five 2-A rated extinguishers.



This ABC extinguisher is rated 3-A:40-B:C. The 3 and the 40 indicate the extinguishing potential for Class A and Class B fires respectively. The C indicates that the agent will not conduct electricity. This unit exceeds the minimum rating for Low and Moderate occupancy requirements.

Size & Placement

Class B Locations

Source: NFPA 10, 2002 edition Table 5.3.1 Fire Extinguisher Size and Placement for Class B Hazards

Type of Hazard	Basic Minimum Extinguisher Rating	Maximum Travel Distance to Extinguisher
Light (Low)	5-B	30 ft.
	10-B	50 ft.
Ordinary (Moderate)	10-B	30 ft.
	20-B	50 ft.
Extra (High)	40-B	30 ft.
	80-B	50 ft.

Size & Placement

Class A Locations

Source: NFPA 10, 2002 edition Table 5.2.1 Fire Extinguisher Size and Placement for Class A Hazards

Criteria	Light (Low) Hazard Occupancy	Ordinary (Moderate) Hazard Occupancy	Extra (High) Hazard Occupancy
Minimum Rated single extinguisher	2-A	2-A	4-A
Maximum floor area per unit of A	3,000 ft ²	1,500 ft ²	1,000 ft ²
Maximum floor area for extinguisher	11,250 ft ²	11,250 ft ²	11,250 ft ²
Maximum travel distance to extinguisher	75 ft.	75 ft.	75 ft.