

# Protect Assets with Alternatives to Dry Chemical Extinguishers

Written by Nona Peterson - 12-01-2023

Here are some options for situations where extinguishant such as dry chemical cannot be used because of potential contamination by the residue if the extinguisher was discharged. There is a growing selection of fire extinguishers that can be used to protect high-value assets in specialty facilities such as museums or clean rooms, or on electronic equipment in telecommunications. Although not always required by building or fire code, these are often preferred to other fire-extinguishing agents such as dry chemicals.



## Carbon Dioxide

Smothers fires with CO<sub>2</sub>, eliminating the oxygen supply, and removes the heat from the fire as CO<sub>2</sub> converts from a liquid to a vapor. CO<sub>2</sub> extinguishant does not leave a residue which makes it effective for use on sensitive electronic equipment.

**NFPA 10** defines Carbon dioxide as being a colorless, odorless, electrically nonconductive inert gas that is a suitable medium for extinguishing Class B and Class C fires.

- Electronics/Research Facilities/Clean Room
- Vehicle/Aircraft/Marine Service Centers
- Parking Garage/Hotel Guest Area/Retail
- Light Manufacturing
- Painting, Dipping and Coating Facilities
- Hospitals/Operating Rooms

## Carbon Dioxide - Non-Magnetic

Same properties as regular Carbon Dioxide extinguishers. Tested to 11.7 Tesla or less.

Tested and Approved for Use in MRI Facilities  
**NFPA 10** defines Carbon dioxide as being a colorless, odorless, electrically nonconductive inert gas that is a suitable medium for extinguishing Class B and Class C fires.

- Sanitary White Paint Finish
- Non-magnetic Wall Bracket Included
- MRI Rooms



## Clean Agent

Extinguishes fires by interrupting the chemical reaction of the fire triangle with the use of halogenated chemicals. There are several variations including Halotron 1® and DuPont FE-36®, both of which are rated for Class B and C fires, with models over 10 lbs. also rated for Class A fires. **IFC and NFPA 10** define clean agent as an electrically nonconducting, volatile or gaseous fire extinguishant that does not leave a residue upon evaporation.

**NFPA 10 5.3.2.6** states that use of halon agents shall be limited to applications where a clean agent is necessary to extinguish fire efficiently without damaging the equipment or area being protected or where the use of alternative agents has the potential to cause a hazard to personnel in the area.

- Computer/Telecom/Data Storage
- Museums/Record Storage/Libraries
- Electronics/Research Facilities/Clean Room
- Laboratories/Medical except MRI
- Manufacturing Plants/Warehouses
- Military Electronics
- Vehicles/Boats/Aircraft/Aircraft Servicing
- Painting, Dipping and Coating Facilities

## Water Mist - Non-Magnetic

Extinguish fires by spraying a non-toxic water mist that removes the heat element of the fire. For use on Class A and C fires. Water mist extinguishers isolate the user from electrical shock because the water is expelled in microdroplets, making it ideal for use on energized electrical equipment. Constructed of non-magnetic components for use in medical and MRI facilities tested to 3 or 11.7 Tesla or less. Electrically non-conductive. **NFPA 10** defines water mist fire extinguishers as containing distilled or de-ionized water and employing a nozzle that discharges the agent in a fine spray.

- Pool Chemical Storage
- Hospitals/Operating/Clean Room
- Telecommunications/Offices
- Vehicle/Aircraft/Marine Service Centers
- Offices/Classrooms/Churches
- Light Manufacturing/Research Facilities
- Painting, Dipping and Coating Facilities
- Tested & Approved for MRI Facilities
- Sanitary White Paint Finish

APPLICATION	CLEAN AGENT*	WATER MIST	CARBON DIOXIDE	CARBON DIOXIDE NON-MAGNETIC
Computer Data Storage	B:C			
Telecommunications	B:C	A:C	B:C	
Electronics	B:C	A:C	B:C	
Research Facility	B:C	A:C	B:C	
MRI		A:C		B: C
Medical (Not MRI)/Laboratory	B:C	A:C	B:C	
Pool/Chemical Storage		A:C		
Clean Room	B:C	A:C	B:C	
Vehicle/Aircraft Marine Service	B:C	A:C	B:C	
Parking Garage	B:C	A:C	B:C	
Hotel Guest Area/Retail	B:C	A:C	B:C	
Museum/Record Storage/Library	B:C	A:C		
Offices/Classrooms/Churches	B:C	A:C	B:C	
Manufacturing Plant/Warehouse	B:C	A:C	B:C	
Military Electronics	B:C	A:C	B:C	
Painting, Dipping, Coating Facility	B:C	A:C	B:C	

  

Operating Temperature	-65 to 140°F	40 to 120°F	-22 to 120°F	-22 to 120°F
Extinguishant	Halotron® IDuPont FE-36	De-ionized water	Carbon Dioxide	Carbon Dioxide
Wheeled	Yes	No	Yes	No

\* Extinguishers greater than 10 lbs also have an 1 A:10 or 2 A:10 listing

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