

Suppression Method	Pros	Cons	Recommendations
Carbon Dioxide	• Easier to refill, and more companies offer it • Refills are cheaper than clean agents • NFPA specifically mentions CO2 for dust collectors • Better for deep seated fires than clean agents	• Not suitable for occupied areas • More expensive initial cost than clean agents • More installation space required	Usually going to be the most reliable at extinguishing fires. Great for areas of higher fire risk.
Inert Gas (Inergen, Argon)	• Zero ozone depletion rate • No global warming potential • Suitable for class D fires • Inergen is suitable for occupied areas • Cheaper to refill than clean agents	• Argon is not suitable for occupied areas • More expensive initial cost than clean agents	Best if used in applications involving the possibility of metal fires (eg. Machine shop).
Novec 1230	• Zero ozone depletion rate • Low global warming potential • 20 year warranty if its use is restricted • Cheaper delivery as it ships as an unpressurized liquid	• More expensive per pound than FM-200 • One of the newest agents to hit the market, not as much testing has been done on it	Recommended if the company or their area is environmentally friendly (eg. California).
FM-200	• Zero ozone depletion rate • Safe for human exposure • Uses direct or indirect release methods, which is cheaper than traditional pipes	• Possible future restrictions due to high global warming potential • More expensive than Ecaro	Recommended for areas where there isn't much storage space, or for applications where a control panel is not wanted/neded.
Ecaro-25	• Zero ozone depletion rate • Uses less agent than FM-200 • Cheaper than FM-200 • Longer hold time than FM-200	• Not suitable for occupied areas • Possible future restrictions due to high global warming potential	Great for applications where price is a big factor, but the chance of a fire is relatively low.
Dry Chemical	• Wider operating temperature range • Cheaper than clean agents • Can be used without fire dampers	• Does not protect against deep seated fires • Filters will need to be replaced after discharge • Multiple nozzles placed at specific spots to ensure the filters are fully coated	Viable for systems that have to be stored outside in an area where the temperature drops below freezing. Potential to be used for systems where fire dampers cannot be used. Generally not recommended.
Water	• Can use a buildings existing water system • Extremely cost effective • Can be used without fire dampers or control panel	• Water can cause more damage than the fire • Longer extinguishing time	Great for applications where gallons of water won't cause excessive amounts of damage. This is usually the cheapest option as it does not need a control panel or fire dampers.