

# Common Myth #20

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## You cannot use dry chemical with foam.

### Description

**Not True!** For decades, dry chemical and foam have been used in “twin agent” attacks for Air Crash Rescue Fire Fighting. The idea is to use the superior “flame knock-down” of dry chemical (usually Purple-K) with the superior “securement” capabilities of foam (usually an AFFF or FFFP) to cut a path to the aircraft so that rescue operations could be performed quickly.

**Multi-person attack:** This same principle may be used with hand portables in small-scale situations where two or more individuals are available to attack the fire.

Dry Chemical puts out Class B fire by interrupting the chain reaction in the “fire tetrahedron.” This means that the fuel is not being taken away, the oxygen is not being depleted and no significant cooling is taking place so the possibility of “reflash” is always present. You either put out 100% of the fire with dry chemical or you put out 0% of it. Dry chemical will provide a “heat shield” to the operator and the solid particles will reflect radiant heat away from the extinguisher operator. Dry chemical also has superior “flame knock-down,” having the ability to push the fire back away from the operator.

This is not the case with foam. Foam creates a blanket that separates the fuel, and more importantly its vapors, from the flame, radiant heat and oxygen, causing the fire to go out. Unfortunately, foam only works on two dimensional hazards or fires. The fire must either be a spill or a fuel-in- depth fire in order for foam to accomplish complete extinguishment by itself. Foam also offers no protection to the operator from radiant heat, and does not have the “flame knock-down” characteristics of dry chemical that pushes the fire back away from the operator.

Now, imagine if these two extinguishing agents were used together. The dry chemical operates first, pushing the flame-front away from the people attacking the fire. Foam is then applied behind the dry chemical stream to keep the fire from “flashing back” thereby securing the fuel vapors.

What better way to safely extinguish a Class B fire? Combine any one of our dry chemical extinguishers with one of our foam extinguishers and you have a “one-two” combination “punch” that is unequaled with any single hand portable or any two dry chemical extinguishers used together.