

FOAM

June 2011

FIREFIGHTER TRAINING

Firefighter Daily Quick
Drills - Easy Access to
Training Topics

Using Foam as an Extinguishing Agent

References:

Delmar Handbook 3rd edition,
pages 338-340
J&B Fundamentals 2nd
edition, pages 521-522
IFSTA Essentials 5th edition,
page 734

NFPA 1001, 2008 JPR
6.3.1

Three ways foam is used as an extinguishing agent.

1. Separation of fuel and heat source.
2. Cooling the fuel and surrounding surfaces.
3. Suppression of flammable vapors.

What type of foam should be used?

1. Standard fire class letter designations also apply to fire fighting foams.
2. Foam concentrates are designed for use on specific fuels.
3. Fuel type affects the proportioning concentration that should be used.
4. Fuel type affects the application method.
5. Incorrect use of foams can result in an unsuccessful extinguishing attempt and could endanger firefighters.

What kind of factors affect foam application rates?

1. Type of foam concentrate used
2. Whether or not the fuel is on fire
3. Type of fuel (hydrocarbon/polar solvent) involved
4. Whether the fuel is spilled or in a tank (If the fuel is in a tank, the type of tank will have a bearing on the application rate)
5. Whether the foam is applied via a fixed system or portable equipment