FOAM

June 2011

FIREFIGHTER TRAINING

Firefighter Daily Quick Drills - Easy Access to Training Topics

Proportioning Concentrates

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

3% foam = 97 parts of water + 3 parts foam concentrate

The unit of measure does not matter as long as both water and concentrate are measured in the same units.

Class B foams are normally mixed in proportions of 1% to 6%.

Class A foams can be mixed across a wider range of proportions than Class B foams.

Class A:
Dry (thick) foam used for exposure protection and fire breaks can be produced by increasing the percentage of foam concentrate.

Wet (thin) foam that will sink below the surface of the fuel can be produced by decreasing the percentage of foam concentrate.

Class B:
3% concentrate is normally used for hydrocarbon fuels.

6% concentrate is normally used for polar solvent fuels.

Multipurpose foam is often mixed at 3% concentration regardless of the fuel.

Medium-expansion foam is normally mixed at 1½%, 2%, or 3% concentrations.

NORTH CAROLINA DEPARTMENT OF INSURANCE
OSFM
OFFICE OF STATE FIRE MARSHAL

Research and Program Development
www.ncdoi.com/OSFM/RPD/rpd_home.asp