
From: Fletcher, Steven G CIV NAVSEA HQ, SEA 05
To: Vara, Mitchell L CIV SEA 05
Sent: 1/11/2016 3:56:39 PM
Subject: FW: Mil Spec AFFF
Attachments: EN vs MIL SPEC Excerpts from SFPE AFFF Chapter by Scheffey.docx

-----Original Message-----

From: Joe Scheffey [mailto:jscheffey@jensenhughes.com]
Sent: Thursday, November 19, 2015 10:34 AM
To: Hunstad, Mary P CIV NAVSEA HQ, SEA 05; Jerry Back
Cc: Fletcher, Steven G CIV NAVSEA HQ, SEA 05
Subject: [Non-DoD Source] RE: Mil Spec AFFF

I have attached an excerpt from the latest edition of my SFPE chapter on AFFF. From this, note the following:

"The International Organization for Standardization (ISO) has issued a specification for low-expansion foams, EN 1568-3.(Ref 26). The specification includes definitions for protein, fluoroprotein, synthetic, alcohol resistant, AFFF, and FFFP concentrates. A positive spreading coefficient is required for film-forming foams when cyclohexane is used as the test fuel. There are toxicity, corrosion, sedimentation, viscosity, expansion, and drainage criteria. The fire test uses a 2.4-m (8-ft) diameter circular pan with heptane as the fuel. The UNI 86 foam nozzle is used for either a "forceful" or "gentle" application method at a flow rate of 11.4 L/min (3 gpm). The application rate is 2.4 L/min/m² (0.06 gpm/ft²). For the greatest performance level, a 3 minute extinguishment time is required. This extinguishment time results in an extinguishment application density of 7.6 l/m² (0.19 gal/ft²)."

The extinguishment densities for the 28 and 50 sq ft MIL SPEC tests are 0.036 gal/ft² and 0.033 gal/ft², respectively. The EN test is not equivalent to the MIL SPEC in terms of extinguishment density. However, note that the EN test uses a fixed nozzle scenario. That makes direct 1:1 comparison difficult. The only way to know is to test the foam using the MIL SPEC method.

My reference to the EN Spec is from 2001. We could verify that no changes have been made. Advise if you want us to chase this further.

Joe

-----Original Message-----

From: Hunstad, Mary P CIV NAVSEA HQ, SEA 05 [mailto:mary.hunstad@navy.mil]
Sent: Wednesday, November 18, 2015 3:19 PM
To: Jerry Back <JBACK@jensenhughes.com>; Joe Scheffey <jscheffey@jensenhughes.com>
Cc: Fletcher, Steven G CIV NAVSEA HQ, SEA 05 <steven.g.fletcher@navy.mil>
Subject: Mil Spec AFFF

Jerry/Joe -

Are either of you familiar with the European standard EN 1568-3. There is a mfr in France that is making the claim that their "Flufoam 6" meets the EN standard and then goes on to say that EN standard is equivalent to MIL-F-24385. We don't have the EN standard, but I would think it unlikely they are equivalent.

Mary

v/r
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