

Common Myth #2

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Higher UL ratings will put out more fire.

Description

Depends. A wise instructor at the Texas A & M Fire School has said **“UL ratings have never put out a fire, fire extinguishers in the hands of capable operators put out fires.”**

UL Class B fire tests are run on only one type of fire, fuel in depth. The larger the pan fire, the larger the rating and the longer the extinguisher must discharge. For a given size extinguisher the resulting effect is a lower flow rate.

Other class B fires such as three-dimensional fires (where fuel is running from one level to another), or liquid fuel fires under pressure (like a failed pump seal or flange), require high flow rates in order to extinguish the fire. Amerex High Performance Fast Flow extinguishers have higher flow rates that can handle these types of fires, but because of faster discharge times they also have lower UL ratings. These qualities, in fact, make them far more versatile and effective for a variety of fire situations and are even required by NFPA 10, Section 5.5.

When used on fuel in depth fires they are more effective than extinguishers with high UL ratings and low flow rates as long as they are being used by trained operators. The higher flow rate puts more chemical into the flame front and has greater flame “ knock-down”.

NFPA 10 states:

In the Annex (for informational purposes only)

A.5.5.1.1 Pressurized flammable liquids and pressurized gas fires are considered to be a special hazard. Class B fire extinguishers containing agents other than dry chemical are relatively ineffective on this type of hazard due to stream and agent characteristics. The system used to rate the effectiveness of extinguishers on Class B fires (flammable liquids in depth) is not applicable to these types of hazards. It has been determined that special nozzle design and rates of agent application are required to cope with such hazards.

A.5.5.1.1.2 A three-dimensional Class B fire involves Class B materials in motion, such as pouring, running, or dripping flammable liquids, and generally includes vertical as well as one or more horizontal surfaces. Fires of this nature are considered to be a special hazard. The system used to rate the effectiveness of extinguishers on Class B fires (flammable liquids in depth) is not applicable to these types of hazards. It has been determined that special nozzle design and rates of agent application are required to cope with such hazards.

Caution: It is undesirable to attempt to extinguish this type of fire unless there is reasonable assurance that the source of fuel can be promptly shut off.

And in the main body (enforceable)

“5.5 Selection for Specific Hazards

5.5.1 Class B Fires.

5.5.1.1* Extinguishers for Pressurized Flammable Liquids and Pressurized Gas Fires.

5.5.1.1.1 Selection of fire extinguishers for this type of hazard shall be made on the basis of recommendations by manufacturers of this specialized equipment.

5.5.1.1.2* Large capacity dry chemical extinguishers of 10 lb. (4.54 kg) or greater and a discharge rate of 1 lb./sec (0.45 kg/sec or more shall be used to protect these hazards.

5.5.2 Three-Dimensional Fires. Large capacity dry chemical extinguishers of 10 lb. (4.54 kg) or greater and a discharge rate of 1 lb./sec (0.45 kg/sec or more shall be used to protect these hazards.....

5.5.4 Obstacle Fires. Selection of a fire extinguisher for this type of hazard shall be based on one of the following:

(1) Extinguisher containing a vapor suppressing foam agent

(2)*Multiple extinguishers containing non-vapor suppressing Class B agents intended for simultaneous application

(3) Larger capacity dry chemical extinguishers of 10 lb. (4.54 kg) or greater and a discharge rate of 1 lb./sec (0.45 kg/sec or more shall be used to protect these hazards.

If you look at most situations that require a Class B fire extinguisher, the potential for fires other than fuel in depth or spill fires also exist. That’s where **Amerex Fast Flow High Performance fire extinguishers** prove their superiority, and that’s where larger capacity (20 lb. and 30 lb.) extinguishers with lower UL ratings and greater flow rate are more effective at suppressing these fires.”

CAUTION: The most effective and safest method for extinguishing a pressurized fire is to shut off the source of the fuel. If a pressurized flammable gas fire is extinguished without shutting off the fuel, the potential hazard fire area will increase quickly as a vapor cloud will form and find a source of ignition.