

## Size Doesn't Matter

There are many cases when simply being bigger is not better! Take fire extinguishers for example. You might see all sizes of fire extinguishers at your worksite. You might think that a bigger fire extinguisher would be better than a smaller one, and that a bigger one would extinguish more fire than a smaller one. But that is not always true since size does not matter when it comes to how effective an extinguisher will be.

So how would you know which one has the right amount of extinguishing agent for you? The answer is actually found on the label on the extinguisher itself. Simply look for the UL rating.

Underwriter's Laboratory (UL) is an independent testing agency that tests things. One of the many products that they test are fire extinguishers. They ensure the extinguishers meet ANSI and NFPA standards and actually test each type of extinguisher to see how much of each class of fire that the extinguisher will put out. If you want to read more about how they test fire extinguishers, [follow this link to the UL fire extinguisher rating webpage.](#)

Looking at the UL listing on a fire extinguisher label, you will see that it will tell you the classes of fire for which it is designed. Below the UL listing there will also be a series of numbers and letter. Take a typical multipurpose dry chemical extinguisher for example. Here you will find that it will have a number in front of the letter "A" on the listing, and a number in front of the letter "B" on the listing. These numbers tell you the effectiveness of the extinguisher for a particular type of unit. Find an extinguisher and see if you can see what we mean.

For example, if you see a typical unit with a 2-A:10-B:C listing, it tells you what UL has determined It has been shown to extinguish a specific amount of Class A materials and Class B materials. Class C fires are not assigned a number since a Class C fire is normally a Class A or B fire with the addition of current - or electrical issues. A Class C rating from UL simply means that it will not conduct electricity and is safe to use on another Class of fire that also has electrical potential.

So then what do the other numbers mean on the extinguisher and why is this important? The answer is simple when you understand the Classes of fires that were discussed last week. As we know, Class A fires involve ordinary combustible solids. And normally, the material that we extinguish these types of fires with is water. So UL tests the extinguisher and sees

how effective the extinguisher is and compares it to an amount of water. A 1-A rating would mean that the extinguisher is as effective as 1 1/4 gallons of water. A 2-A rating would indicate that it is as effective on Class A materials as 2 1/2 gallons of water.

For Class B fires, UL tests the fire extinguisher on fires involving flammable liquids. In assigning the rating for that, they determine the number of square feet of the material that the extinguisher is able to extinguish. A 10-B rating means that the extinguisher was shown to be effective in extinguishing 10 square feet during the test. A 40-B extinguisher will be effective in extinguishing 40 square feet.

Why is this important? Because, just as it is important to know the class of fire that is burning, and that your extinguisher will work on that type of fire, you also need to know that you have enough extinguishing agent to do the job. Don't assume that a bigger unit will necessarily be better. A 20 pound CO2 extinguisher may only be as effective as a small 5 pound dry chemical unit.

And the time to read the label is before a fire happens. If you have to stop to read the label while a fire is burning, you might give the fire enough time to grow beyond your ability to control it. Do yourself a favor, and look at the extinguisher closest to where you work today. Find out what class(es) of fire it is rated for and how much fire it can put out. When you have a choice to use one or the other, don't go with the bigger unit, go with the one that has the highest rating per the UL tests.

If you want to know if you have the right extinguisher to do the job, or what you need to comply with OSHA, you can follow this [link to the OSHA etool for fire extinguishers](#). Or call us at SCM. We can evaluate your fire prevention and safety plan.

In next week's safety tip we will spend some time discussing fire extinguisher placement. *Do you know where your fire extinguisher is?* If you want a refresher on the classes of fire, let us know, we can resend last week's safety tip.