

## All fire extinguishers are not equal

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**You've seen them - you may even own one: small fire extinguishers that fit in nicely with your kitchen decor or on your boat. But as unobtrusive as the pint-sized extinguishers are, they may not be up to the challenge of putting out a typical fire.**

A pot catches fire on your stove. After one minute the flames are still contained. But in less than two minutes the fire is starting to spread.

Just two and a half minutes after the fire starts, a firefighter tries to put it out. But he can't.

This fire would have been worse if this were a real kitchen.

Fire doubles in size every minute, and in an enclosed room, the heat would build up. The smoke would be so thick you'd have a hard time breathing and you may not even be able to see the fire.

But if you have a fire, it doesn't have to end this way.

The firefighter couldn't put out the fire because he was using an extinguisher that wasn't big enough - one that weighed  $\frac{3}{4}$  of a pound.

And it's the number-one selling fire extinguisher in Canada.

With a smaller extinguisher, you have just eight seconds to put out a fire. It even says so in the owner's manual.

We spoke with fire departments across the country and almost all of them recommend a five-pound multi-purpose extinguisher.

They say the smallest you should have is 2.5 lbs, and that's just for your kitchen.

But there are several extinguishers on the market smaller than that.

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MORE: [What the labels mean](#) »

The  $\frac{3}{4}$  lb extinguisher is the smallest, and it's manufactured exclusively for Canadian Tire.

More than 90,000 of these extinguishers were sold in one year, almost double the next biggest seller.

Canadian Tire has sold it for a number of uses. But the ones that concern fire safety experts the most, besides the kitchen, are for use in cars and boats.

"You couldn't put out a very large fire with that type of extinguisher," says Greg Meaker, a boating safety officer with the Canadian Coast Guard.

"It just wouldn't have the necessary product in the extinguisher to put it out."

Meaker adds that "one of the things you have to look out for on the boat is that the boat is always in motion. So if you've got burning liquid on the stove you have to extinguish it quickly or it could spread to other parts of the vessel."

And if you're out on the lake when fire breaks out, you can't call the fire department.



*A pot catches fire on a stove... In less than two minutes the fire will spread*



*Fire doubles in size every minute*



*Fire safety experts are concerned that if you have one of these smaller extinguishers, you may have a false sense of security.*



*Greg Meaker*

According to the Coast Guard, the right equipment means a minimum two-pound extinguisher.

*Marketplace* wanted to see how the ¾-pound extinguisher would perform in fighting a car fire.

The Burlington, Ont. Fire Department agreed to help us with the demonstration.

Firefighter Ben Rotsma explains: "What I'm doing is I'm just adding a little bit of gasoline, simulating if there was a gas leak at the carburetor.

"We're going to have the firefighters come in, ignite the fire, close the hood, because normally the hood would be closed and you'd notice smoke coming out from under the hood. And we'll see what happens from there."

After five minutes, a firefighter moves in to try to put out the fire with the ¾ pound extinguisher. He has just eight seconds to do so, but he can't do it.

We wanted to see if the extinguisher would perform better if the hood was open. Another firefighter tried, but he was wearing full protective clothing and breathing apparatus.

This time it worked. So why not just open the hood all the time?

According to Rotsma, "if he had no gloves, if the average person was to go and open the hood, you can see that the flames and the heat would roll out towards you.

"As the hood goes higher, the heat comes right towards a person. So we strongly recommend against anybody opening the hood at that point... the materials burning under here give off poisonous, noxious gases. You could have pressurized liquids, flammable liquids, all kinds of hazards."

We also wanted to see how the ¾ pound extinguisher would work in fighting a fire inside a car.

At three and a half minutes into the burn, the firefighter goes in to try to extinguish the fire. He can't put it out.

"Again, the size of the extinguisher is related to the size of fire that you can extinguish," Rotsma says.

"We don't want people to get too confident or too comfortable and getting in too close with an extinguisher that may not be large enough to fight the fire."

But the bottom line is, when it comes to fighting car fires, fire departments feel there is no right size of extinguisher.



*If you don't have the right equipment on board and have a fire, this is what your boat will probably look like*



*Ben Rotsma*



*"People should not try to fight a car fire," Rotsma says. "...Stay away from the car and call the fire department"*



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"People should not try to fight a car fire," Rotsma says. "They should stay away from the car and call the fire department. It can go drastically wrong in a very short period of time."

*not be large enough to fight the fire," says Rotsma*

As we saw in our demonstrations, the smaller extinguisher was not capable of putting out most fires once they started to spread. And it didn't take long for that to happen.

We wanted to talk to the people who manufacture, sell and test this extinguisher, but none of them would talk to us on camera.

Canadian Tire told us it's changing its packaging to make sure "the information provided to consumers ... is as clear as possible."

It's dropping all references to specific uses such as cars and boats.

Canadian Tire said the newly packaged extinguishers would be in all its stores across Canada by the end of February.

However, we've checked a number of stores across the country and some of the old packaging is still on the shelves. The extinguishers are approved by ULC.

We wondered about this label (see image at right). It says the product is a home extinguisher for use in the kitchen. And yet it's been sold for use in cars and boats.

ULC says it doesn't take issue with packaging unless the claims are clearly false.

We asked the manufacturer, Strike First, to respond to concerns that these extinguishers may not be capable of putting out car and boat fires.

The president of the company told us "it is impossible to predict how any fire extinguisher, regardless of size or type, would handle a spreading fire."

**Update:** We've continued to check the packaging of fire extinguishers at Canadian Tire since our story aired. The last time we looked, the old packaging was still available in stores across the country.

And there's something else you should know. Fire extinguisher packages may say they're rechargeable, but almost every fire equipment service company we spoke with says they won't recharge any extinguisher with a plastic head assembly. The companies say such extinguishers aren't reliable in holding a charge.

Also, information supplied to *Marketplace* after this segment first aired revealed that West Vancouver has a fire extinguisher bylaw. All new homes, and any additions to existing homes, are required to have a five-pound multipurpose extinguisher. They have to be located within a reasonable distance from the kitchen, and on the same floor as the kitchen at all times.



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