



# Frequently Asked Questions

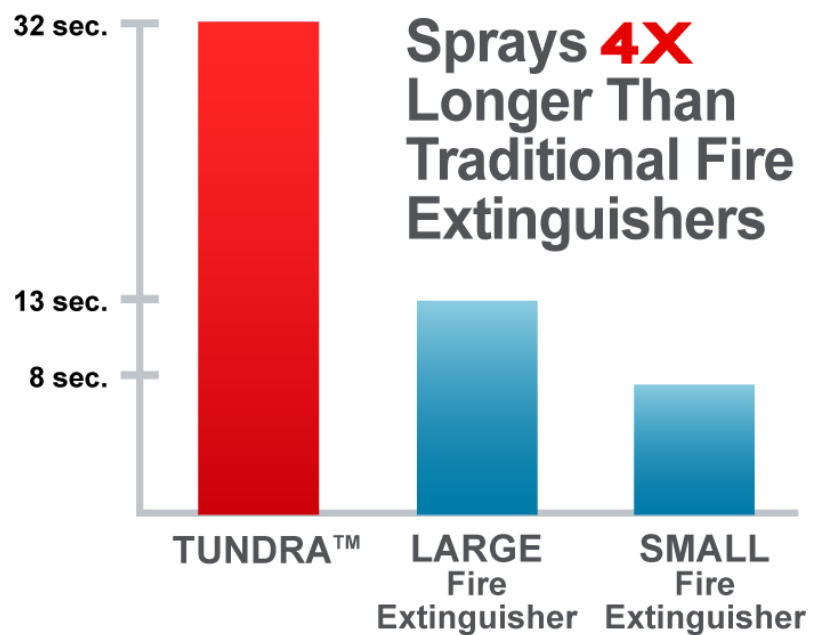
## Introduction

First Alert has launched Tundra™ Fire Extinguishing Spray, a **S**trong, **A**ccurate, **F**ast and **E**ffective new home-safety tool to extinguish fires. Tundra™ Fire Extinguishing Spray contains a powerful, proven and effective liquid firefighting agent in a familiar spray can that is more effective on common fires and easier to operate than a typical fire extinguisher. It is effective on fires including paper, fabric, wood, cooking oil and electrical fires. Perfect for Home, Office, Auto, Boat, RV, Camping, Dorm and Workshop.



**Question:** How effective is Tundra™ Fire Extinguishing Spray vs. a Traditional Fire Extinguisher?

**Answer:** Tundra™ Fire Extinguishing Spray is more effective on common fires than a small kitchen fire extinguisher (5-B:C) or a large 2.5lb. fire extinguisher (1-A: 10-B:C). The 4X longer discharge time vs. a traditional small kitchen fire extinguisher allows more time to fight a fire. Faster suppression of a fire may help reduce loss of life and property damage. This is a selling point when discussing with our customers who have multi-family facility managers and owners as their customers.





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**Question:** What makes Tundra™ Fire Extinguishing Spray more effective than other aerosol type spray fire extinguishers?

**Answer:** Tundra™ Fire Extinguishing Spray is far superior when compared to other aerosol fire suppressant products on the market. Here's why:

### *Proprietary Wide Spray Nozzle*

A first in the industry. The wide spray pattern allows the agent to more effectively fight a greater surface area of the fire at once - 3X greater than a typical actuator. This feature has a patent pending.

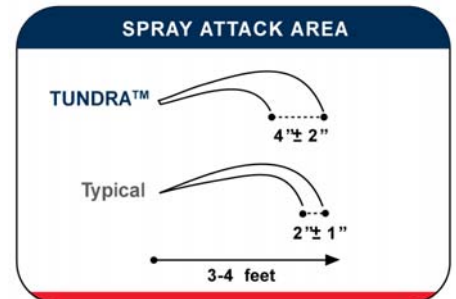
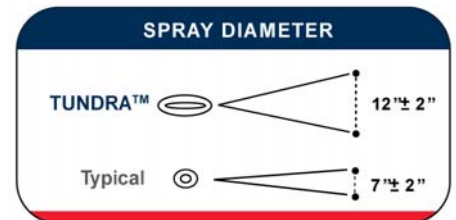


### *Internal Pouch- In-Can Technology*

An internal pouch isolates the extinguishing agent from the propellant. When the spray nozzle is pressed, only the agent is released. The propellant stays inside the can so the fire is not agitated.

### *Effective on Electrical Fires*

Tundra™ Fire Extinguishing Spray is effective on electrically charged fires up to 35,000 volts. Certain other aerosol fire suppressant products cannot be used on an electrically charged fire. This is a key feature when selling to facility managers and apartment owners because of its use in the kitchen which include electrical appliances such as electric stoves, toasters, etc.



**Question:** How easy is the agent in Tundra™ Fire Extinguishing Spray to clean up?

**Answer:** Tundra™ Fire Extinguishing Spray cleans up with a damp cloth or sponge. It won't damage appliance or counter surfaces like a traditional ABC fire extinguisher. If an ABC extinguisher is used in a kitchen, it sticks to surfaces and is very hard to clean up. Many times appliances need to be thrown away. Tundra™ Fire Extinguishing Spray reduces maintenance and cleanup costs.



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**Question:** What types of fires does Tundra™ Fire Extinguishing Spray extinguish?

**Answer:** As with a traditional ABC fire extinguisher, Tundra™ Fire Extinguishing Spray is effective on Common Household, Cooking Oil and Electrical Fires.



GREASE

### *Cooking Oil Fires*

TUNDRA™ Fire Extinguishing Spray is unique in that it is able to extinguish cooking oil fires. The liquid contents create a barrier or “blanket” that rapidly extinguishes the fire. Other aerosol fire suppressant products may increase the size of grease fires due to their high water content.



FABRIC/WOOD

### *Common Household Fires*

TUNDRA™ Fire Extinguishing Spray is able to extinguish common fires such as fabrics, paper, and wood.



ELECTRIC

### *Fires Involving Electrical Equipment*

TUNDRA™ Fire Extinguishing Spray is effective to use on fires involving electrical equipment of 110/220 volts (e.g., a fire started by a toaster). Independent testing has shown the spray pattern is not electrically conductive at 35,000 volts, even from 10 inches. Other aerosol fire suppressant products cannot be used on electrically charged fires.

**Question:** How does Tundra™ Fire Extinguishing Spray’s agent compare to a dry chemical fire extinguisher’s agent?

**Answer:** Tundra™ Fire Extinguishing Spray is a liquid type agent that has a patent pending proprietary formula. A traditional dry chemical fire extinguisher uses one of two agents, sodium bicarbonate or baking soda for a B:C rated extinguisher and Monoammonium phosphate for the A portion of the ABC type. Whether referring to Tundra™ Fire Extinguishing Spray or either of the traditional fire extinguisher’s agents, they all operate approximately the same way. That is as they are applied to a fire (heat) they flow and smother the fire, absorbing heat energy while preventing oxygen to feed the fire. These actions are what extinguish the fire. Tundra™ Fire Extinguishing Spray



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and an “A” rated fire extinguisher also have the added benefit of coating and sticking to paper type fires to prevent re-ignition of the paper. Tundra™ Fire Extinguishing Spray also has the added benefits of cooling down the fire to also help prevent re-ignition while being easy to clean up. The chemical in an ABC fire extinguisher sticks to everything once heated and is very difficult to clean.

**Question:** Is Tundra™ Fire Extinguishing Spray ANSI/UL Listed?

**Answer:** Currently there are no UL (Underwriters Laboratories, Inc.) or ANSI (American National Standard Institute) Standards that exist for these new and innovative fire protection solutions. Aerosol Fire Extinguishing Powders and Sprays have been recognized as a valuable home safety tool by other world recognized authorities including the BSI (British Standards Institute), Standards Australia, Standards New Zealand, KOFEIC (Korean Fire Equipment Inspection Corporation) and JFEII (Japan Fire Equipment Inspection Institute).

That’s why the Tundra™ Fire Extinguishing Spray has been tested to the qualified performance requirements of ANSI/UL 711, UL 711A and KOFEIC 0108 by Intertek Testing Services NA, Inc. (ETL), a scope accredited Nationally Recognized Testing Laboratory (NRTL). Third party testing includes paper trashcan fires, curtain fires, wooden “crib” fires, cushion fires and small and large scale cooking oil fires at temperatures of 32°F, 70°F and 104°F as well as documented testing on electrical conductivity to 35,000 V from as close as 10 inches.

The Standards development process is a collaborative effort by industry experts that include fire services, health and safety experts, product manufacturers, etc. We have initiated the lengthy process with nationally recognized third party certifiers including UL and ETL (Intertek Testing Services, NA Inc.) here in the United States, to help create such a document for liquid fire Extinguishing Sprays like Tundra™ and continue to pursue this activity.



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**Question:** Why can't Tundra™ Fire Extinguishing Spray currently be sold in California?

**Answer:** Tundra™ Fire Extinguishing Spray cannot be sold in the State of California because the California State Fire Marshal (CSFM) will only recognize and allow to be sold in the state an ANSI/UL listed product for the fire extinguishing category of products. We are working with them so they understand the efficacy and benefits of Tundra™ Fire Extinguishing Spray. But until then Tundra™ Fire Extinguishing Spray cannot be sold in California. CSFM is the only agency to take such a stance. In fact, fire marshals around the country have embraced Tundra™ Fire Extinguishing Spray.

**Question:** Will Tundra™ Fire Extinguishing Spray meet requirements for compliance 2.5lb. fire extinguisher in multi-family dwellings?

**Answer:** No. Because Tundra™ Fire Extinguishing Spray does not carry a UL rating it will not meet code requirements where a UL rated ABC fire extinguisher is required, for example in some multi-family dwellings. However, Tundra™ Fire Extinguishing Spray is an excellent choice to supplement those 2.5lb fire extinguisher requirements. The goal is to get a fire extinguished quickly before it grows into a larger fire potentially resulting in loss of life or property damage. Tundra™ Fire Extinguishing Spray is intuitive to use and offers a better chance the tenant will know how to use it and ultimately extinguish the fire while it's still small. Apartment owners recognize this and are adding Tundra™ Fire Extinguishing Spray to their fire safety requirements.

**Question:** How does Tundra™ Fire Extinguishing Spray match up to the UL fire extinguisher ratings of A, B, C?

**Answer:** As stated above Tundra™ Fire Extinguishing Spray will extinguish fires that fall under the ABC ratings by UL. As stated earlier, although no formal rating exists, we have tested Tundra™ Fire Extinguishing Spray to most of the same UL and ANSI tests. It will extinguish the same types of fires but may not meet



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the size of fire ratings. That is why we are confident in stating on our package and literature that Tundra™ Fire Extinguishing Spray is effective on these types of fires.

**Question:** How do I use Tundra™ Fire Extinguishing Spray?

**Answer:** Tundra™ Fire Extinguishing Spray is intuitive to use. Everyone knows how to use a spray product. Therefore, precious time is not lost trying to figure out how to operate it like a traditional fire extinguisher. No pins to pull or bulky cans to lift increase the chance that a homeowner/tenant will fight an initial fire. As far as fighting a fire, Tundra™ Fire Extinguishing Spray should be aimed at the base of a fire, using a sweeping motion as with a traditional fire extinguisher.

**Question:** What are the shipping requirements for Tundra™ Fire Extinguishing Spray?

**Answer:** Tundra™ Fire Extinguishing Spray ships like an ordinary aerosol product such as spray paint or WD-40. It ship under the ORM-D classification. There are no Hazmat shipping fees as with a traditional fire extinguisher.

CONSUMER COMMODITY



**Question:** What is the shelf life Tundra™ Fire Extinguishing Spray?

**Answer:** It has approximately the same shelf life as a traditional fire extinguisher. ANSI/UL standards say a fire extinguisher must stay pressurized for at least two years. Tundra™ Fire Extinguishing Spray has a three year Performance shelf life printed right on the can. We chose a very conservative time frame because this is a life safety device and the unit does not have an indicating gauge to tell the user if it is pressurized. The unit may last for 5 years or more.





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**Question:** What is the operating temperature and temperature storage requirements of Tundra™ Fire Extinguishing Spray?

**Answer:** Tundra™ Fire Extinguishing Spray has an operating temperature between 32°F and 104°F. It can be stored at temperatures below freezing and up to 160°F. It will freeze below 20°F, however upon thawing will still function normally. It will not operate however, while frozen. At 160°F the product will still spray but due to the higher internal pressure will probably evacuate the can faster than 32 seconds as stated in our literature. Fire fighting properties are not affected. Tundra™ Fire Extinguishing Spray can be stored in an automobile as long as temperatures above are not exceeded. In addition, the minimum temperature at which the can could burst is 670°F as stated by the can manufacturer.

**Question:** Once I use Tundra™ Fire Extinguishing Spray can I use it again?

**Answer:** No. We recommend extinguishing the entire contents to assure the fire is out and remains out. Discard and replace with a new can of Tundra™ Fire Extinguishing Spray.