

# Deep Fat Fryers



## What's the deal with deep fat fryers?

From fast food to fine dining, the deep fat fryer has revolutionised how we prepare and enjoy food. Used correctly, they're an essential part of any commercial kitchen. But their location, maintenance and volume of fuel (namely fats or oils) mean they can be dangerous.

A lot of oils will spontaneously ignite around 250°C. But when bits of food stay in the oil, or the oil ages, it can occur at much lower temperatures.



## Danger points

There are three main reasons why fires start with fryers; poor maintenance, a build-up of grease around the frying area (ducting etc) and a lack of space between fryers and other open flames or burners. These are all dangers which should be dealt with.

## Maintenance made simple

Read the manufacturer's instructions – they're designed to keep your fryer in good shape (call them for a copy if you can't find the original instructions). Thoroughly clean the fryer and all components regularly. Gas valves, fittings and lines should also be inspected once a year for leaks (get a professional in if you're unsure) – and make sure any flexible hoses are of braided steel.

## Make housekeeping a habit

Cleaning cloths with oil and fats have been known to spontaneously ignite in some conditions. Wash them right away, or pop them in a steel bin. Duct filters should be cleaned *weekly* so they function well (and look good too). All kitchen extraction system components should be cleaned regularly and inspected at least once a year. Depending on how often the fryer is used we recommend:

- **12-16 hours of usage per day**
  - inspect and clean every 3 months
- **6-12 hours of usage per day**
  - inspect and clean every 6 months
- **1-6 hours of usage per day**
  - inspect and clean every 12 months

## Drain, drain go away...

Cooking oil/fat should be checked daily and drained weekly. Crumbs and debris should be removed, and any waste should be held in metal bin with a secure lid. You should ALWAYS isolate the deep fat fryer from gas or electricity when not in use – with the main valve/switch.

## Mind the gap

A minimum of 40-50cm should be kept between the deep fat fryer and any other open flame. You can easily install a non-combustible barrier to get around this. Floor and wall coverings should be non-absorbent, and all deep fat fryers should have temperature controls and a secondary thermostat set to 220°C to prevent overheating. Finally, each vat should have a close-fitting steel lid.

## Fight fire fast

Don't forget it's essential you have at least one fully-charged Wet Chemical Fire Extinguisher that's easily accessible near the area of your fryer. It should be 3F rated for oil and fat volumes up to 17.5 litres, and 4F rated up to a volume of 52.5 litres. Similarly you should have a fire blanket of 1.8m x 1.2m handy. After extinguishing a fire, lids or the blanket cannot be removed until the oil or fat is at room temperature.

## And finally, don't forget training

It's a good idea for you and your staff to get some training on how to use a fire extinguisher and fire blanket safely. We hope you'll never need it, but the training can also help you understand the ways in which a deep fat fryer fire can be extinguished and how to keep yourself safe.

---

Visit [Vero.co.nz/risk-profiler](https://www.vero.co.nz/risk-profiler) to check out our other advice sheets for more tips and in-depth information about managing risk.

**vero**

---

**Disclaimer** – The information presented is of a general nature only and is provided only to help you understand some of the physical risks a business may have and what an insurer might expect you do to manage those risks. It is not intended for any other purpose. You should always seek appropriate professional advice about how you manage the particular risks in your business. No representation or warranty, expressed or implied, is made as to the accuracy or completeness of the information and no responsibility is accepted for any loss, penalty or damages (including special or consequential damages) arising out of the use of all or part of the information. The information presented does not replace the need for appropriate professional advice. Reliance on this communication will not affect or influence policy response.