



Safety alert 5/2010

Explosion of aerosol can in café

Incident

Two chefs received flash burns to their upper bodies when an aerosol can of cooking oil exploded in a busy café. As a result of the explosion, a large window at the front of the café blew outwards. Luckily, no patrons or other staff members were injured.

At the time of the incident, two chefs were in the open plan kitchen cooking breakfast in frying pans placed on lit gas burners. The aerosol can was placed on the kitchen work bench next to lit gas burners. As a result, the contents inside the aerosol can heated up, causing them to expand until the can could not withstand the internal pressure.

The base of the aerosol can blew out, causing the contents to be released in the atmosphere. The propellant inside the can (17 percent propane and 83 percent butane) was ignited by the naked flame resulting in an explosion.

Factors to consider

- The aerosol spray can of cooking oil was standing in the kitchen next to a heat source.
- The contents of the aerosol can expanded as a result of the heat, which caused the explosion.
- Propellants in aerosol cans are mostly hydrocarbons stored under pressure in a gaseous state.
- Hydrocarbons are flammable and should be kept away from extreme heat and ignition sources.
- Aerosol cans containing cooking oil or fly spray have exploded before in kitchens when placed near heat sources.

Recommendations

1. Do not place aerosol cans next to heat sources or in hot areas in kitchens, such as next to lit gas burners, close to electric stoves or on top of rangehood.
2. Do not place aerosol cans in direct sunlight.
3. Do not use aerosol cans near naked flames or ignition sources.
4. Read the safety information on the aerosol can before use and storage.

Further information

Further information can be obtained from WorkSafe's internet site www.worksafe.wa.gov.au or by contacting customer service on 1300 307 877 or email safety@commerce.wa.gov.au

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