

- **Substitute** the present cleaner for a less hazardous one. If a paste could be used instead of a spray, there would be no airborne contamination to be concerned with. Contact your supplier to determine if there are non-caustic products that can clean ovens and stove tops.
- **Isolation** is not practicable for the kitchen hand but the other workers should be kept away from the immediate area if the caustic cleaner is being used.
- **Engineering** controls are possible in the form of long handled scrubbing brushes and a device for arms length operation of pressure pack sprays. This will allow the kitchen hand to clean the largest oven without having to put his head and shoulders into it. Ensure that all extraction fans are turned on during the cleaning operation.
- **Administrative** controls include more frequent cleaning of the ovens to reduce fat build up, ensuring that the kitchen hand is aware of the risks and follows safe operating procedures. Ensure that the worker knows what to do in the event of skin or eye contact.
- **Personal protective equipment** is important for this task. Caustic oven cleaners are the most effective for stubborn residues and they are applied by hand. The worker needs to be supplied with skin and eye protection. That is long rubber gloves, long sleeved disposable overalls with a hood and eye protection or a face shield.

Determine the control(s) that are to be put in place and record what you have done. Collect together all of the documentation and place it in the register along with the MSDS for the substance.

Re-assess the health risk whenever there is a change in the process, the substance or the personnel involved. In any case the law requires that the task is reassessed in five years.

See the booklet "Chemical Use" for more information. Responsible Use of Chemicals will assist with assessment and documentation. It is available in hard copy from www.eric.sa.gov.au

Where can I find more help?

WORKPLACE SERVICES

Call us on
1300 365 255

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Visit our website
[www. **Eric** .sa.gov.au](http://www.Eric.sa.gov.au)

Statewide Emergency
Serious accidents and incidents report number
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OVEN CLEANER

Chemical Use

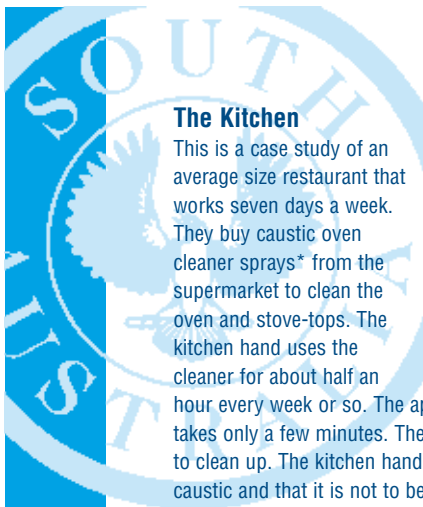


MAJOR WORKPLACE HAZARDS

WORKPLACE SERVICES
Department for Administrative
and Information Services



Government
of South Australia



The Kitchen

This is a case study of an average size restaurant that works seven days a week. They buy caustic oven cleaner sprays* from the supermarket to clean the oven and stove-tops. The kitchen hand uses the cleaner for about half an hour every week or so. The application of the spray takes only a few minutes. The rest of the time is used to clean up. The kitchen hand knows that the product is caustic and that it is not to be used when the gas burners are lit. Other employees are not at risk because the kitchen hand is the only one in the kitchen during cleaning and vapours are kept to a minimum as the cleaner is used on a cool surface.

Legislative Requirement

Because they work with hazardous substances, it is necessary for the management of this restaurant to comply with the Hazardous Substances Regulations proclaimed under the Occupational Health Safety & Welfare Act 1986. This law requires management to:

- access information on hazardous products
- determine the extent of worker exposure to those products
- assess the risk to workers health from this exposure
- bring in appropriate controls to minimise health risk
- ensure that operators are trained
- record the process.

Advice

Restaurant management must access information from the manufacturer on the nature of the hazardous substance, its health effects and its safe use. This comes on a material safety data sheet (MSDS).

*If these oven cleaners contain more than 1% caustic soda (sodium hydroxide) they are classified by Worksafe as hazardous substances. Most contain 5% or more. These will carry a label that states that it is hazardous or poisonous.

The supermarket will not normally carry MSDS so the manufacturer will have to be contacted direct.

The MSDS should be placed in a folder, The Hazardous Substances Register. All workers who may be exposed to the oven cleaner must be given access to this Register.

With the MSDS available it is now possible to conduct a health risk assessment of this task, in consultation with the workers.

This assessment would identify:

- the brand of oven cleaner
- what the active ingredients are and if they are hazardous
- who uses the oven cleaner
- how the cleaner should be used
- how and when it actually is used
- if there is potential for substance misuse
- potential for skin or eye contact with the cleaner
- potential for breathing in caustic mists
- others likely to be exposed
- health effects of exposure to the cleaner (on MSDS)
- if workers are suffering any of these health effects
- if there is a history of injury or disease from use of this substance
- what controls should be in place
- if the controls are working
- the level of worker's knowledge and competence.

With the above information it will be possible to decide whether there is a significant health risk from using the cleaner.

Example

The kitchen hand wears long sleeves and rubber gloves to spray NaK caustic oven cleaner and scrub out the ovens. There are no reports of skin damage or eye irritation. However, the kitchen hand has reported a choking sensation or "raw throat" when spraying the cleaner in the largest oven. He has to put his head and shoulders in to reach the back of this oven. When the inside of the largest oven is cleaned, it is possible to get caustic drips on the face and neck as well as in the hair.

Worksafe have declared a national exposure standard of 2mg per cubic metre of clean air for sodium hydroxide.

There are exhaust fans in the kitchen but they are not effective inside the oven space. No respiratory protection has ever been used in the kitchens.

One of the staff remembers seeing a newspaper report of a woman suffering severe burns to her arms from a foaming oven cleaner but there are no reports of injury to workers among the local restaurants.

In conclusion, there is a health risk from using caustic oven cleaner. The kitchen hand could spray caustic cleaner on his skin, get splashes in his eyes, drips on his face and hair and breathe in vapours and mists. The main exposure is from spraying the foaming cleaner into the ovens and onto the stove-tops. Scrubbing and wiping the ovens clean can result in exposure to diluted caustic. With this minor use there is no need for atmospheric monitoring or health surveillance.

Control Options

The purpose of these control options is to eliminate exposure to the caustic cleaner or if that is not reasonably practicable reduce exposure to the lowest practicable level. Some examples of action that could be taken include:

- **Eliminate** the exposure. Maybe the ovens could be cleaned with soap solution or cloudy ammonia on a daily basis to eliminate fat build-up so that a strong caustic cleaner is not required.