

# Safety and health alert

## 18/95 Acid burns from aluminium cleaner

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### Incident

A car cleaner cleaning an aluminium ute tray spilled aluminium brightener containing hydrofluoric acid on his hands, causing painful burns.

In October 1994, a laboratory worker died following ten per cent body burns caused by exposure to concentrated hydrofluoric acid ([Significant Incident Summary 18/1994](#), available from DOHSWA).

### Factors

The cleaner applied the aluminium brightener with a spray pack, which leaked the solution onto his hand.

The aluminium brightener contained 5 per cent hydrofluoric acid. Even weak solutions of hydrofluoric acid rapidly penetrate skin, destroying soft tissue and bone.

No appropriate first aid supplies were supplied to treat exposure to hydrofluoric acid. Because hydrofluoric acid penetrates skin, a neutralising agent (calcium gluconate gel), which will also penetrate skin, needs to be applied after the skin is washed. Personal protective equipment, such as gloves, was not readily available.

The cleaner was not aware that aluminium brightener contained hydrofluoric acid, and was not aware of the hazardous nature of hydrofluoric acid. No material safety data sheets (MSDSs) were available. **The cleaner did not have adequate information to perform his work safely.**

### Recommendations

#### Employers must

- keep material safety data sheets for all hazardous substances, and pass the information on to employees.
- ensure that employees understand the information in the MSDS, and use aluminium brightener in accordance with the MSDS.
- implement and supervise safe systems of work.
- supply personal protective clothing and equipment.

#### Following exposure to hydrofluoric acid

- Remove contaminated clothing and wash affected area with copious amounts of water. Immediately apply calcium gluconate gel, preferably wearing gloves, until medical attention is available.

## Further Information

Further information can be obtained from the WorkSafe internet site [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au), or by contacting customer service on 1300 307 877 or email: [safety@docep.wa.gov.au](mailto:safety@docep.wa.gov.au).

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