

Safety and health alert

09/97 Glazier burnt cutting laminated glass

Incident

An 18-year-old apprentice glazier suffered severe burns to the neck, face and arms and was hospitalised in May 1997 as a result of a solvent fire that occurred during the cutting of laminated glass at a workshop in Canning Vale. The apprentice was cutting 20 mm thick laminated glass and applying methylated spirits to the laminate to facilitate the cutting process. The solvent was burnt off twice but when reapplied the third time, the flame was not extinguished. This caused the plastic coke bottle containing the methylated spirits to explode.

Factors

1. The use of a plastic bottle that was not designed for the safe application of methylated spirits.
2. The application of methylated spirits to a cut that had a source of ignition. The flame was difficult to see due to the clean burning properties of alcohol.
3. Lack of personal protective equipment. The employee was wearing polyester/cotton, which fueled the fire.
4. Lack of proper information, instruction, training and supervision of the apprentice.

Recommendations

1. When a hazardous substance is to be used within a workplace, workers must be consulted, a register kept and an assessment conducted on the safe use of the hazardous substance. See regulations 5.11 to 5.15 of the *Occupational Safety and Health Regulations 1996*.
2. Provide adequate information, instruction, training and supervision to all employees, particularly young or new employees, to ensure safe work practices are implemented and followed. The use of written instructions is encouraged.
3. Where possible, substitute the process of cutting laminated glass using methylated spirits with a less-hazardous process. For example, consider fully automated laser cutting or hot wire cutting.
4. When applying methylated spirits to any hot surface, ensure employees use safety squeeze bottles that prevent flame flashback.
5. Containers containing decanted hazardous substances must be suitably labeled. See regulation 5.12.
6. Ensure employees wear adequate protective clothing that is appropriate to the risk. In this case, fire-resistant wool coveralls.

Further Information

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

A414288

Date: March 1997

