

# Work **Safe!** Bulletin

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## NEVER USE GASOLINE OR FLAMMABLE SOLVENTS AS CLEANING AGENTS

Tragedy was narrowly averted when gasoline vapour exploded in the bay of a service station. A worker at the station was using gasoline to clean the floor of the service bays. The doors to the area were closed and the gasoline vapours built up to an explosive concentration. The pilot light of a water heater provided the source of ignition for the resulting explosion.



The blast blew out the front windows of the service station. Fortunately, the worker involved escaped injury.

This incident dramatically illustrates the hazards of using a flammable solvent such as gasoline for cleaning purposes. Gasoline evaporates very rapidly into the atmosphere and thus can quickly form an explosive mixture with air. This explosive mixture is easily ignited by a small spark or flame.

It is important that floors be kept clean of accumulations of grease and oil. The following proper cleaning procedure should be used to minimize risks to workers:

- (a) Remove gross accumulations of grease and oil by scraping up or shoveling the material into a disposal container.
- (b) Absorb the remaining oil film with clay, diatomaceous earth or other non-combustible absorbent material.
- (c) Wash the floor with an industrial, non-volatile, biodegradable, detergent solution.
- (d) Rinse the floor with clean water.

Some **NON-FLAMMABLE** solvents may be considered for cleaning floors but care must be used to ensure that adequate ventilation is provided, proper protective equipment is worn, and that the resultant solvent-grease-oil solution is disposed of in an environmentally acceptable manner. Solvent mixtures should never be flushed into floor drains or other openings where they may enter a sewer system or otherwise be discharged indiscriminately to the environment.