

MAKROSAFE Holdings (Pty) Ltd

SAFETY ALERT!

Hazardous Chemical Substance – Drain Cleaner

The purpose of this safety alert is to highlight the dangers associated with household cleaning chemicals and suggest possible control measures to assist industry to manage the risk.



Background

A worker received third degree burns to 13 percent of his body when using a new drain cleaning product containing 98 percent sulphuric acid. In an attempt to unblock a public toilet drain, workers placed a hose into the drain and poured the cleaning product through a funnel. Subsequently, the acid spat back onto the workers. Despite prompt attempts to wash off the acid, one of the workers received serious burns. The Material Safety Data Sheet (MSDS) and product label did not provide adequate directions, safety information and statements to inform the user of the risks involved when using the product.

Contributing factors

- ✓ Sulphuric acid is a high-risk chemical for use in drain cleaning products. It is known to get dangerously hot and to erupt when added to water. It may also react with sulphides, resulting in the release of highly toxic hydrogen sulphide.
- ✓ The manufacturer/supplier had not provided adequate directions, safety information and statements to inform the user of the risks involved when using the product.
- ✓ The employer had not carried out a pre-purchase risk assessment on the hazardous substance and considered less hazardous alternatives or chemical-free methods of clearing the drain.
- ✓ The workers did not use adequate personal protective equipment.

Action Required

- ✓ Sulphuric acid based drain cleaners should be avoided, due to the intense heat produced and the possible reaction with sulphides.
- ✓ Manufacturers or importers of hazardous substances should ensure that the design of the product is such that it is safe for the intended use.
- ✓ Manufacturers or suppliers must provide adequate directions, safety information and statements to inform users of the risks.
- ✓ Manufacturers or suppliers must provide a copy of the MSDS when they supply a substance for the first time.
- ✓ Employers must carry out a pre-purchase risk assessment on hazardous substances and less hazardous substances or chemical-free methods should be considered as part of this.
- ✓ Employers must keep a register of hazardous substances, including copies of MSDS.
- ✓ Employers must ensure employees receive adequate training and keep training records.
- ✓ Employees must use the adequate personal protective clothing and equipment that is provided.