

The Control of Substances Hazardous to Health Regulations Safe Beer Line Cleaning



Relevant legislation:

The Health & Safety at Work etc. Act 1974

The Control of Substances Hazardous to Health Regulations

The Management of Health & Safety at Work Regulations 1999

The following is an example of an accident involving beer line cleaner and illustrates its potential to cause serious injury:

Officers from the Department have recently conducted an investigation involving a publican who suffered serious injuries when neat beer line cleaner caused blood poisoning. Her injuries were caused as she was decanting the neat substance in order to dilute it for pipe cleaning. She did not realise that it had splashed onto her foot, as it initially contacted her clothing.

At the time of the accident she was wearing goggles, gauntlets and a protective rubber apron. Although the accident victim was wearing enclosed shoes, these did not extend to the ankles.

The substance ate through the clothing and contacted her skin. She did not associate an itching that then developed some hours later, on her ankle, with the beer line cleaning activity, and therefore failed to take immediate action.

By the time she sought medical attention the substance had eaten down through the flesh, as far down as her ankle bone. She eventually attended the accident and emergency department of the local hospital when she was unable to walk and was experiencing severe pain. She was advised that had she attended the hospital any later, then the substance would have reached the bone, necessitating amputation.

What is beer line cleaner?

- Beer line cleaner is a type of cleaning product used to remove yeast build up in cellar pipelines in order to maintain the quality of the product received by the customer.
- Beer line cleaner is used throughout the licensing and hospitality trade.
- Whilst beer line cleaner is manufactured by numerous companies, the active ingredients in the different products will be similar. The neat products are usually categorised as **corrosive** substances.

What is a corrosive substance?

- A corrosive substance is capable of causing very serious burn injuries to the skin and eyes.
- A chemical burn is an acute severe irritant reaction, which causes irreparable damage to cells.

Why is beer line cleaner a problem?

Used correctly, beer line cleaner presents an effective way of maintaining hygienic pipes, however problems will occur if people conducting the beer line cleaning are not trained in the correct procedures &/or do not wear suitable and sufficient personal protective equipment.

Complacency amongst staff who have been involved with beer line cleaning for a long time can also lead to the failure to use correct equipment or take short cuts to complete the process quicker.

The handling of this substance requires considerable care and the wearing of appropriate personal protective equipment to prevent chemical contact with the skin.

As an employer - what should be done?

The Control of Substances Hazardous to Health Regulations require that assessments of hazardous substances be conducted. The hierarchy of actions expected of an employer begins with eliminating the need for using a hazardous substance if possible, by either changing the process or substituting it with an alternative. In the case of beer line cleaning however, it seems that this is not an option.

Therefore a full assessment is necessary which determines:

- **equipment** that should be used e.g. cleaning bottle & funnel to safely transfer the neat substance into the bottle for dilution.
- correct **dilution** factors
- any necessary **personal protective equipment** that should be worn whilst diluting the substance and also drawing the substance from the pipelines at bar pumps
- **first aid** procedures.
- **prohibited activities** involving the substance - e.g. some publicans have admitted to using the product to clean beer spillage's from the cellar floor and this should not be allowed.

The assessment should be conducted using the manufacturer's hazard data sheet for your particular chemical. This will provide safety information specific to your chemical.

If your premises belongs to a large Company, then it is common for them to have a list of authorised chemicals you should use, and issue COSHH assessments that have been prepared by a competent person. If you currently do not have any COSHH documentation on site then you are recommended to contact your Company's health &

safety officer for further advice.

If however you are a smaller premises, then you may have to prepare your own assessment. Leaflets are available to help you with this process (see the reference below)

As the use of the substance can be so dangerous, you should designate the staff who can conduct the operation. These staff should be fully trained in all relevant procedures.

What personal protective equipment is suitable for use with beer line cleaner?

This is dependant upon the substance you use, and should be detailed in the manufacturer's hazard data sheet. As a minimum, staff who use beer line cleaner should be provided with a chemical resistant apron, close fitting chemical resistant gauntlets and chemical resistant goggles. The need for protective chemical resistant footwear e.g. wellingtons should also be considered.

If the hazard data sheet does not appear to be specific, you are recommended to contact the manufacturer's technical department for advice and clarification.

What procedures should be followed when testing that the beer lines are clear of the beer line cleaning substance?

Again due to complacency the correct procedures are often not followed: in some premises officers have found that in order to test whether the beer pipes are clear of cleaner, staff hold their fingers beneath the running liquids at the pumps to feel the texture - a slimy texture indicating that the cleaner is still present. This is **not** a safe system of work.

Even diluted beer line cleaner is capable of causing skin problems, and therefore it is essential that safe procedures are implemented and that staff are provided with the correct equipment to do the job.

Again you should contact the substance's manufacturer for advice regarding this matter. One way to conduct a safe test, is the use of rinse test paper. This is held under the running liquid and changes colour to indicate whether or not the pipes are clear of the cleaner.

Usually the manufacturer of a substance will also provide the relevant testing method & this should be confirmed and included in your safe systems of work.

What is suitable first aid treatment in association with Beer Line cleaner?

You should refer to the manufacturer's hazard data sheet for first aid information specific to a particular substance, however basically it is essential that the affected site is treated by immediate irrigation with copious amounts of water. Delay in doing this will lead to more serious and permanent injuries. Following a chemical burn, even if the area is irrigated, scarring and post injury eczema can occur.

Helpful Information

- Manufacturers hazard data sheets - free of charge..
- COSHH- a brief guide to the Regulations leaflet INDG136rev2 - free from your local Health & Safety enforcement officers.

Contact

For more information please contact Health & Safety on 0121 704 6828 or via email at safety@solihull.gov.uk