

# P47

## COSHH essentials for printers



This information is intended to help employers in the printing industry comply with the requirements of the Control of Substances

Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure to chemicals and protect workers' health.

It is also useful for trade union safety representatives.

# Biological monitoring for isocyanates

## Supplementary advice

### What is biological monitoring?

Biological monitoring means measuring for isocyanate breakdown products in a sample of workers' urine. This will tell if they have been exposed to isocyanate.

Urine samples should be collected immediately the task or shift has finished.

Biological monitoring gives no information about health - it is simply a measure of exposure. You need to explain this clearly to everyone taking part, and get his or her informed consent.

### Why do I need to do biological monitoring?

You are using isocyanates, which cause occupational asthma. Exposure should be as low as is reasonably practicable. Biological monitoring shows if the worker has taken in isocyanate. If they have, the controls (eg fume extraction, respiratory protective equipment) are not working properly. It is time to investigate.

Controls include:

- work process, work organisation and worker behaviour to minimise exposure;
- enclosed curing systems;
- respiratory protective equipment;
- excluding other people from areas where isocyanates are used.

### Who needs biological monitoring?

Everyone working with or near isocyanates. This does **not** include workers in offices attached to print shops, for example. Isocyanates occur in:

- 2-pack lacquers, inks and varnishes;
- some adhesives, eg in laminating or finishing;
- more rarely, inks and coating products for packaging.

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## What specialist help do I need?

The Health and Safety Laboratory (HSL) offers a commercial, confidential service to measure isocyanate breakdown products in urine. HSL charges about £50 per sample, which includes a kit for collection, packing and instructions. Other laboratories may be able to offer equivalent services. Any laboratory offering a service should participate in a relevant Quality Assurance scheme

Results need interpreting, eg why are the results high? HSL can advise on simple practical ways of setting up a biological monitoring programme, and can help in interpreting the results.

Contact:

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