

RB1

COSHH essentials for
rubber manufacturers

Fume – general ventilation

Control approach 1 General ventilation

The Control of Substances Hazardous to Health Regulations 2002 (COSHH) require employers to ensure that exposure is prevented or, where this is not reasonably practicable, adequately controlled. This guidance gives practical advice on how this can be achieved by applying the principles of good practice for the control of exposure to substances hazardous to health, as required by COSHH.

It is aimed at people whose responsibilities include the management of substances hazardous to health at work (eg. occupational health specialists, anyone undertaking COSHH assessments and supervisors). It is also useful for trade union and employee safety representatives. It will help you carry out COSHH assessments, review existing assessments, deliver training and supervise activities involving substances hazardous to health.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. But if you do follow the guidance, you will normally be doing enough to comply with the law. Health and safety inspectors seek to secure compliance with the law and may refer to this guidance.

See Essential information near the end of the sheet.

What this sheet covers

This sheet describes good control practice when using general ventilation to reduce fume, for example near curing ovens. It covers the key points to follow to reduce exposure to an adequate level. Follow all the points, or use equally effective measures.

There may be specific tasks where additional controls may be required – see other task sheets in this series.

Main points

- Keep exposures to rubber fume as low as reasonably practicable.
- Make sure the controls work.

Hazards

- ✓ Rubber fume may be released when making rubber compounds, or when converting blended ingredients into finished parts and products.
- ✓ Chronic inhalation exposure to rubber dust and fume in rubber factories can cause higher than normal incidence of some types of cancers. Skin exposure to rubber fume may cause dermatitis and skin allergies.
- ✓ The workplace exposure limit (WEL) of rubber process dust is detailed in HSE publication [EH40/2005 Workplace Exposure limits](#)

Access to work area

- ✓ Allow access to authorised and appropriately trained people only.

Equipment and procedures

- ✓ Fume is hot and tends to rise. Provide high-level air vents or extraction fans located above and in line with the rows of ovens so that any fume leaves the building with the air convection currents, away from doors, windows and air inlets.
- ✓ Provide low-level air inlets to ensure that clean air is drawn into the building. Inlet air may need warming in winter.
- ✓ Consider connecting the room ventilation with the lighting circuit to ensure ventilation is switched on when the room is occupied.
- ✓ Consider people working at height, eg. if you have a manned overhead travelling crane, the driver's cab needs clean air.
- ✓ Always confirm that any extraction is turned on and working at the start of work.

Personal decontamination and skin care

- ✓ Provide warm water, mild skin cleansers, and soft paper or fabric towels for drying. Avoid abrasive cleansers.
- ✓ Provide pre-work skin creams, which will make it easier to wash dirt from the skin.
- ✓ Provide after-work creams to replenish skin oils.

Caution: 'Barrier creams' are not 'liquid gloves' and do not provide a full barrier.

Maintenance, examination and testing

- ✓ Keep all equipment used for the task in effective working order. Maintain it as advised by the supplier or installer.
- ✓ Noisy or vibrating fans can indicate a problem. Get someone to investigate and repair.
- ✓ Keep records of all examinations for at least five years.

Cleaning and housekeeping

- ✓ Clean work equipment and the work area daily. Clean other equipment and the workroom regularly – at least once a week.

Health surveillance

- ✓ Provide health surveillance for dermatitis where there is a reasonable likelihood that dermatitis may occur in your workplace. See sheet G403.

Training and supervision

- ✓ Provide supervision – ensure that safe work procedures are followed.
- ✓ Tell workers about the hazards associated with their work and how to recognise early signs of asthma and dermatitis.
- ✓ Provide workers with training on:
 - working safely with hazardous substances;
 - when and how to use controls;
 - how to check they are working;
 - what to do if something goes wrong.
- ✓ Training records are helpful to demonstrate training has taken place.
- ✓ Changes to the work process mean that staff may need retraining.
- ✓ Involve managers and supervisors in health and safety training.

Essential information

You can find the full COSHH essentials series at www.hse.gov.uk/coshh/essentials/

COSHH essentials for rubber manufacturers: Advice for managers
COSHH Guidance Sheet RB0 HSE 2016
www.hse.gov.uk/pubns/guidance/rb0.pdf

Health surveillance for occupational dermatitis COSHH Guidance Sheet G403 HSE 2011 www.hse.gov.uk/pubns/guidance/g403.pdf

Employee checklist

- If you find any problems, tell your supervisor. Don't just carry on working.
- Use, maintain and store your PPE in accordance with instructions.
- Wash hands before eating, drinking, smoking, using the lavatory and after work.
- Never use solvents to clean your skin.

Further information

Occupational Safety and Health Consultants Register www.oshcr.org/

Safe to breathe: Dust and fume control in the rubber industry, Leaflet IACL95, HSE 1995, www.hse.gov.uk/pubns/rubindex.htm

The British Tyre Manufacturers Association (BTMA): www.btmauk.com

The British Rubber & Polyurethane Products Association (BRPPA):
www.brppa.co.uk

Retread Manufacturers Association: <http://www.retreaders.org.uk/>

For information about health and safety visit <https://books.hse.gov.uk>
or <http://www.hse.gov.uk>

You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

To report inconsistencies or inaccuracies in this guidance, email:
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