

# SR3

COSHH Essentials for  
service and retail

## Fogging and misting using space sprayers

Control approach R Respiratory protective equipment (RPE) / personal protective equipment (PPE)

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

The use of fogging and misting to apply pesticides and insecticides is common in food preparation areas, warehouses, animal housing and garden centres.

This sheet describes good control practice for the control of exposure when using space sprayers for fogging and misting. It covers the key points you need to follow to reduce exposure to an adequate level. This is achieved by following good control practice, ie follow all the points described in this sheet or use equally effective measures and in so doing, reduce exposure to below the relevant workplace exposure limit (WEL).

### Hazards

- ✓ Some concentrates are biocidal products containing chemicals that are toxic by inhalation or to the skin, or are classified as sensitisers, and should be avoided (eg quaternary ammonium compounds) unless the sanitation programme identifies an absolute requirement. Authorised products are safe for use as long as you follow the instructions on the label.
- ✓ Space sprayers produce mists that can be breathed in and deposited on clothing and skin.
- ✓ Contact with many chemicals can lead to skin soreness, itching, rashes and blistering (dermatitis). Some can also damage the eyes.
- ✓ Some products may cause asthma or may be flammable – check the Safety Data Sheet (SDS).
- ✓ Seek specialist advice if you spray products containing enzymes as these have the potential to cause asthma – see Sheet G402 in Essential information.

### Access to work area

- ✓ Clear the treatment area of people before starting work. Check the product label for venting and re-entry instructions.
- ✓ Erect barriers and notices.
- ✓ Only allow access to authorised and appropriately trained people.

### Equipment and procedures

- ✓ Ensure the spray equipment works properly, without leaks.
- ✓ Buy liquid products in easy-pour containers that will minimise risk of spillages.
- ✓ Decant the treatment fluid into a labelled container.
- ✓ Dispose of used fluid containers safely – not by burning.

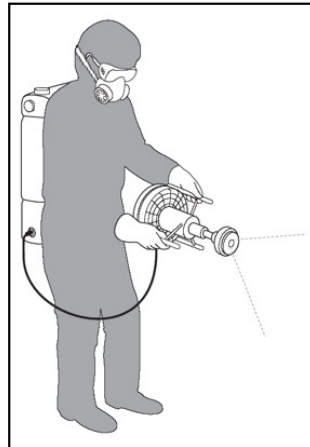
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- ✓ Contractors using professional pesticide products should have a British Pest Control Association (BPCA) qualification – see Essential information.
  - ✓ If possible, buy products in a ready-for-use solution.
  - ✓ Store products safely in a cool, dry, ventilated, dark place, in a way capable of keeping in spills. Only store the amount you need.
  - ✓ Read the instructions on labels carefully – follow the instructions for use.
  - ✓ Close doors and windows, and turn off ventilation systems before starting the treatment.
  - ✓ Start work furthest from the exit and work towards the exit. Keep PPE/ RPE on until you have left the treatment area.
  - ✓ Avoid contact with treated surfaces until they are dry.
  - ✓ Contractors should consider what information needs to be given to the client.

### Respiratory protective equipment (RPE)

- ✓ RPE is normally needed.
- ✓ As a minimum, provide tight-fitting RPE with a filter cartridge capable of protecting against the chemical product. See the chemical supplier's SDS and sheet R3 in Essential information.
- ✓ Fit testing is required for RPE with a tight-fitting face seal. See INDG479 in Further information.
- ✓ Workers wearing tight-fitting RPE must be clean shaven.
- ✓ Ensure RPE is compatible with other PPE worn.
- ✓ Workers should be trained how to check RPE is working properly before every use, how to fit it properly and how to look after it.
- ✓ Keep RPE clean and store it in a clean place.
- ✓ Ensure workers discard disposable RPE at the end of the shift, or sooner if their RPE becomes harder to breathe through.
- ✓ Change the filters on respirators in accordance with manufacturers' recommendations and if:
  - the shelf-life expiry date has passed;
  - they are damaged or visibly contaminated;
  - they become harder to breathe through.
- ✓ For reusable RPE, a thorough maintenance, examination and test should be carried out at least once a month and recorded. However, if the RPE is used only occasionally, an examination and test should be carried out before use and, in any event, the interval should not exceed three months.

### Personal protective equipment (PPE)

- ✓ Provide a waterproof suit and a visor for low-pressure spraying.
- ✓ Provide protective gloves, and ensure that workers use them. Reusable nitrile gloves are acceptable.
- ✓ Provide waterproof, slip-resistant boots and protective goggles.
- ✓ Consult workers to ensure PPE will be suitable for them.
- ✓ Ensure that all items of PPE are compatible.
- ✓ Make suitable arrangements for maintenance, storage and replacement of PPE.



### Personal decontamination and skincare

- ✓ Keep chemicals off your skin – wash off any splashes immediately.
- ✓ 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 contaminants from the skin.
- ✓ Moisturisers should then be used after hand washing.
- ✓ Provide after-work creams to replenish skin oils.

**Caution: These creams are not a substitute for 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.

### Cleaning and housekeeping

- ✓ Deal with spills immediately – absorb liquid spills with granules and decontaminate the area (ask your product supplier or follow the instructions on the Safety Data Sheet).
- ✓ Wash out the equipment after use.
- ✓ Dispose of hazardous wastes safely and follow local authority waste management guidance.

### Health surveillance

- ✓ Employers are required to carry out health surveillance if workers use a product labelled ‘May cause sensitisation by skin contact’ or ‘May cause sensitisation by inhalation’, and in such cases should consult an occupational health professional.
- ✓ Provide health surveillance for asthma where there is a reasonable likelihood that this may occur in your workplace. See sheet G402 in Essential information for further details.
- ✓ Provide health surveillance for dermatitis where there is a reasonable likelihood that this may occur in your workplace. See sheet G403 in Essential information for further details.
- ✓ It may be helpful to consult an occupational health professional on what the health surveillance should cover.

### Training and supervision

- ✓ Tell workers about the hazards associated with their work and how to recognise early signs of asthma and dermatitis.
- ✓ Provide supervision – ensure that safe work procedures are followed.
- ✓ Involve managers and supervisors in health and safety training.

### Essential information

S100 – General advice on chemicals causing harm via skin or eye contact

S102 – Selecting personal protective equipment

G402 – Health surveillance for occupational asthma

G403 – Health surveillance for occupational dermatitis

R3: UK Standard Assigned Protection Factor 20 (APF 20)

British Pest Control Association (BPCA) <https://bpca.org.uk>

### Further information

Posters on protective gloves and skin care  
[www.hse.gov.uk/skin/information.htm](http://www.hse.gov.uk/skin/information.htm)

Occupational Safety and Health Consultants Register [www.oshcr.org/](http://www.oshcr.org/)

*Control of substances hazardous to health: The Control of Substances Hazardous to Health Regulations 2002. Approved Code of Practice and guidance L5 (sixth edition) HSE 2013.*  
<https://www.hse.gov.uk/pubns/books/l5.htm>

You can find the full COSHH Essentials series at  
[www.hse.gov.uk/coshh/index.htm](http://www.hse.gov.uk/coshh/index.htm)

*Preventing contact dermatitis and urticaria at work* INDG233(rev2), HSE 2015. [www.hse.gov.uk/pubns/indg233.pdf](http://www.hse.gov.uk/pubns/indg233.pdf)

*Respiratory protective equipment at work: A practical guide* HSG53 (fourth edition), HSE Books 2013, ISBN 978 0 7176 6454 2.  
[www.hse.gov.uk/pubns/books/hsg53.htm](http://www.hse.gov.uk/pubns/books/hsg53.htm)

INDG479 – Guidance on respiratory protective equipment (RPE) fit testing.

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: [commissioning@tso.co.uk](mailto:commissioning@tso.co.uk)

### Employee checklist

- Is the treatment area vacated?
- Check that any RPE you may wear works properly every time you use it. Look for signs of leaks, wear and damage.
- 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 and drinking, after smoking and using the lavatory, and after work.
- Never clean your hands with concentrated cleaning products or solvents.
- Check your skin regularly for dryness or soreness – make sure you know the procedure on reporting if such symptoms occur. Early intervention means it will be less likely that you develop permanent symptoms.
- Co-operate with health surveillance.