

MR3

COSHH essentials in motor vehicle repair



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, supervisors and 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.

Main points

- Keep exposures as low as possible using all the controls in this sheet.
- Check the controls using biological monitoring.

Cleaning two-pack (2K) paint spray guns

Control approach 3 Containment

What this sheet covers?

This sheet describes good control practice when cleaning spray guns after using two-pack (2K) paint containing isocyanate. 'Isocyanate' means all isocyanate-based two-pack products. It may be described as 'prepolymer'. This still contains active isocyanate.

It covers the key points you need to follow to help reduce exposure to an adequate level. Follow all the points, or use equally effective measures.

Hazards

- ✓ Breathing in isocyanate paint mist can cause asthma.
- ✓ Control exposure to stop occupational asthma developing. Even short-term exposures can cause harm.
- ✓ Isocyanates can cause skin allergies and dermatitis by skin contact.
- ✓ There is no evidence for cancer from isocyanate in paints.

Access to work area

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

Equipment and procedures

- ✓ Spray guns contain isocyanate residues. Clean them only in dedicated enclosed and extracted gun washing equipment.
- ✓ If this is not possible, never spray gun washings in the mixing room or the open workshop. If you must spray washings, use the spray booth or room and wear constant flow airline breathing apparatus for this task.

Respiratory protective equipment (RPE)

- ✓ RPE is not normally needed with a dedicated gun cleaning system with local exhaust ventilation (LEV).

Personal protective equipment (PPE)

- ✓ Provide single-use nitrile gloves.
- ✓ Discard single-use gloves every time they are taken off.
- ✓ Ask your supplier to advise on suitable protective equipment.
- ✓ Make suitable arrangements for maintenance, storage and replacement of PPE.

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, and after-work creams to replace skin oils.

Caution: 'Barrier creams' are not 'liquid gloves' and they 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.
- ✓ Follow any special procedures before any systems are opened or entered, eg purging or cleaning. Don't forget you may need PPE for some maintenance tasks.
- ✓ Visually check all equipment at least once a week for signs of damage or faults.
- ✓ For LEV systems, a user manual or log book is helpful in setting out the frequency of checking, maintenance or parts replacement.
- ✓ For LEV systems with no user manual or log book, you may need the help of a competent person. They can determine the performance needed for adequate control.
- ✓ Keep records of all examinations for at least 5 years.
- ✓ LEV systems require a statutory 'thorough examination and test' (TE_xT).
- ✓ Get a competent person to perform the TE_xT at least every 14 months.
- ✓ HSG258 provides more detailed information on LEV systems and legal and competence requirements.

Exposure monitoring

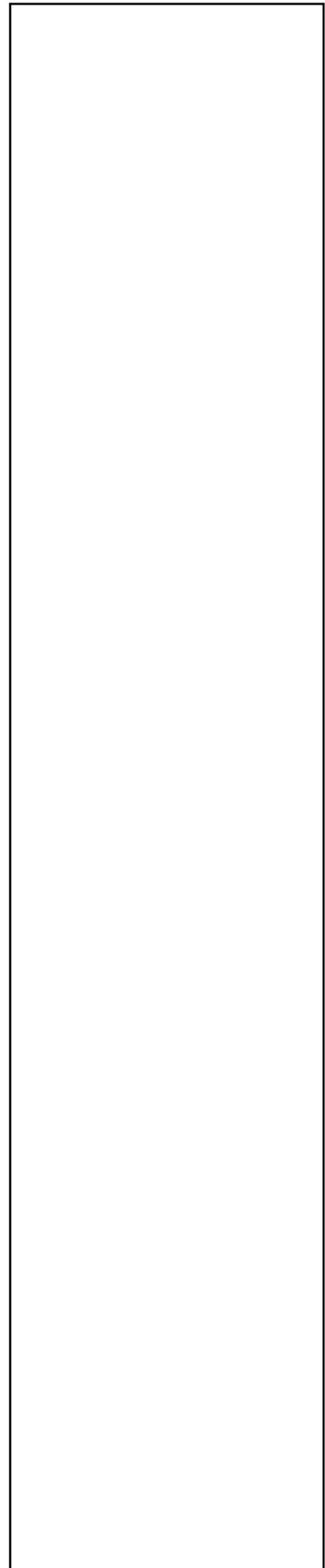
- ✓ Carry out biological monitoring if workers are spraying isocyanate paints.
- ✓ Carry out biological monitoring during the first few months of employment to show that airline breathing apparatus, PPE and working practices are sufficient to control isocyanate exposure. It is good practice to have urine samples taken for sprayers using isocyanate-containing paints once a year and more often if previous biological monitoring exposure results have exceeded the BMGV.

Cleaning and housekeeping

- ✓ Keep the spray booth and surrounding areas clean.
- ✓ Clean the mixing and spraying equipment with the extraction ventilation switched on.
- ✓ Deal with spills immediately — absorb liquid spills with granules and decontaminate (ask your product supplier or follow the safety data sheet instructions).
- ✓ Provide airline breathing apparatus for cleaning up larger spills.
- ✓ Decontaminate wipes and waste paint before disposal as hazardous waste.

Health surveillance

- ✓ Provide health surveillance for asthma where there is a reasonable likelihood that asthma may occur in your workplace. See G402.
- ✓ Provide health surveillance for dermatitis where there is a reasonable likelihood that dermatitis may occur in your workplace. See G403.



Training and supervision

- ✓ Working in the right way and using the controls correctly is important for controlling exposure.
- ✓ Provide supervision – ensure that safe work procedures are followed.
- ✓ Tell your workers:
 - which two-pack paints and products contain isocyanates; and
 - that these can cause asthma and dermatitis, and the signs to watch out for.
- ✓ Involve managers and supervisors in health and safety training.
- ✓ Tell workers about the hazards associated with their work.

Essential information

COSHH essentials in motor vehicle repair: Advice for managers MRO HSE 2011 www.hse.gov.uk/pubns/guidance/mr0.pdf

Spraying two-pack (2K) products in a spray booth or room COSHH Guidance Sheet MR2 HSE 2011 www.hse.gov.uk/pubns/guidance/mr2.pdf

SMART spraying with two-pack (2K) products COSHH Guidance Sheet MR5 HSE 2011 www.hse.gov.uk/pubns/guidance/mr5.pdf

Health surveillance for occupational asthma COSHH Guidance Sheet G402 HSE 2011 www.hse.gov.uk/pubns/guidance/g402.pdf

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

Urine sampling for isocyanate exposure measurement COSHH Guidance Sheet G408 HSE 2011 www.hse.gov.uk/pubns/guidance/g408.pdf

Further Information

Controlling airborne contaminants at work: A guide to local exhaust ventilation (LEV) HSG258 www.hse.gov.uk/pubs/books/hsg258.htm
HSE's LEV webpage: www.hse.gov.uk/lev/

You can find the full COSHH essentials series at www.hse.gov.uk/coshhessentials/index.htm

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

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit 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.

Employee checklist

- Keep unprotected people away while you are using two-pack products.
- Never spray gun washings in the mixing room or the open workshop.
- Decontaminate spills immediately, then clear them up as soon as possible.
- Look for signs of leaks, wear and damage.
- If you find any problems, tell your supervisor. Don't just carry on working.
- Co-operate with health surveillance.
- Use, maintain and store your PPE in accordance with instructions.
- Discard single-use gloves every time you take them off.
- Wash your hands before eating, drinking, smoking and using the toilet.
- Never use solvents to clean your skin.
- Use skin creams provided as instructed.
- Your employer should request you to provide a urine sample to check that you are not exposed to isocyanates. The sample will not be tested for anything else.

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