

SR23

COSHH Essentials for
service and retail

Solvent degreasing (low-volatility, small- scale work)

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 degreasing with low-volatility solvents on a small scale (eg cleaning metal parts manually in, for example, small engineering shops or motor vehicle repair businesses).

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.

Hazards

- ✓ Contact with solvent can lead to dermatitis. Some solvents can also damage the eyes or may be flammable – check the Safety Data Sheet (SDS).
- ✓ Used oils may cause skin cancer.

Access to work area

- ✓ Only allow access to authorised and appropriately trained people.

Equipment and procedures

- ✓ Select only low-volatility, low-toxicity solvents (boiling point above 150°C) where possible.
- ✓ Provide a good standard of general ventilation. This can be natural ventilation from doors, windows etc. or controlled, where air is supplied and/or removed by powered fans. Ensure that supplied or make-up air comes from an uncontaminated area.
- ✓ Use a cleaning station that dispenses the minimum amount of low-volatility solvent and stores waste solvent (see Figure 1).
- ✓ Discharge extracted air to a safe place outside the building away from doors, windows, air inlets and other premises. Ensure, where possible, that air comes from a fresh source, flows past the worker and then past the work activity to the extraction point.
- ✓ Ensure equipment used to dispense the solvent works properly and does not leak.
- ✓ Store products safely in a cool, dry, dark, ventilated place in such a way as to be able to retain any spills. Only store the amount you need.

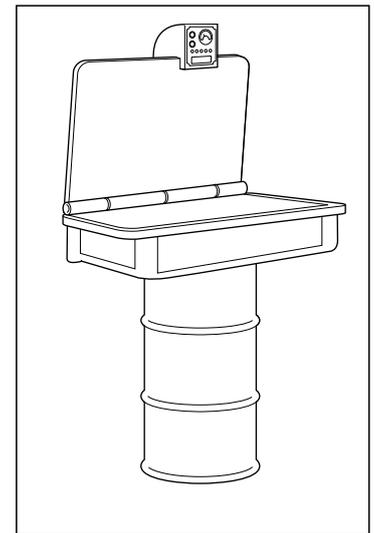


Figure 1 – Small-scale solvent degreasing station

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- ✓ Ensure workers read the instructions on labels and the SDS carefully, following them for use.
 - ✓ Dispose of used products safely and follow local authority waste management guidance.
 - ✓ Buy products in containers that are easy to pour from.
 - ✓ Reduce skin contact with solvents – workers should wash off any splashes immediately.
 - ✓ Put caps back on containers immediately after use and wipe the outside clean.
 - ✓ Ensure workers do not carry oily or solvent-contaminated rags in clothing pockets.

Caution: Never pour waste solvent down the drain. Collect it for recycling.

Respiratory protective equipment (RPE)

- ✓ RPE is not normally needed.
- ✓ RPE may be needed for maintenance and cleaning. In such cases, as a minimum, provide tight-fitting RPE with a filter cartridge capable of protecting against the solvent. See the chemical supplier's SDS and sheet R3 in Essential information. Seek advice from a protective equipment supplier.
- ✓ 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 that RPE is working properly before every use and record this, how to fit it properly, and how to look after it.
- ✓ Change the filters on respirators in accordance with the manufacturer's recommendations and if:
 - the shelf-life expiry date has passed;
 - they are damaged or visibly contaminated;
 - they become harder to breathe through;
 - they have reached their break-through time for vapours or gases.
- ✓ Keep RPE clean and store it in a clean place.
- ✓ For reusable RPE, a thorough maintenance, examination and test should be carried out at least once a month. 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)

- ✓ Follow the PPE advice on the product label and SDS.
- ✓ Provide and ensure that workers use protective gloves. Single-use nitrile gloves are acceptable.
- ✓ If single-use gloves are selected then dispose of them safely every time you take them off.
- ✓ Provide waterproof, slip-resistant boots and protective goggles.
- ✓ Provide eye protection when working with solvents.
- ✓ Ensure that all items of PPE are compatible.

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- ✓ Consult workers to ensure that the PPE will be suitable for them.
 - ✓ Use a contract laundry or a suitable equivalent to wash work clothing. Don't allow workers to wash work clothing at home.
 - ✓ Make suitable arrangements for the correct maintenance, storage and replacement of PPE.

Personal decontamination and skin care

- ✓ Keep solvents off 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 manufacturer, supplier or installer.

Cleaning and housekeeping

- ✓ Clean work equipment and the work area daily. Clean other equipment and the workroom regularly – at least once a week.
- ✓ Deal with spills immediately – absorb liquid spills with granules and decontaminate the area (ask your product supplier or follow the SDS instructions). Practise how to do this.
- ✓ Dispose of hazardous waste safely in a labelled, lidded bin and follow local authority waste management guidance.

Health surveillance

- ✓ Provide health surveillance for dermatitis where there is a reasonable likelihood that this may occur in your workplace. See sheet G403 in Essential information.
- ✓ Consult an occupational health professional on the level of health surveillance required.

Training and supervision

- ✓ Tell workers about the hazards associated with their work and how to recognise early signs of 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.
- ✓ 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

G403 – Health surveillance for occupational dermatitis

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

Further information

Working safely with solvents: A guide to safe working practices Leaflet INDG273(rev1), HSE 2014. www.hse.gov.uk/pubns/indg273.pdf

Skin at work web pages: www.hse.gov.uk/skin

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>

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

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

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

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

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

Employee checklist

- Do you understand the health hazards associated with your work?
- Are you sure about safe working procedures?
- Do you know how to use the controls?
- 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.
- Use skin creams provided as instructed.
- Co-operate with health surveillance.