



Control approach 3

Dry cleaning using chlorinated solvent

SR05

Containment



This guidance sheet is for employers including the self-employed and franchisees

to help them comply with the requirements of the Control of Substances Hazardous to Health Regulations 2002 (COSHH) by controlling exposure to chemicals and protecting workers' health.

The sheet is part of HSE guidance *COSHH essentials: easy steps to control chemicals*. It describes the key points you need to follow to help reduce exposure to an adequate level. It is important to follow all the points, or use equally effective measures.

This sheet applies to chlorinated solvents only. It does not apply to hydrocarbon solvents.

Dry cleaning can lead to exposure by breathing in vapour (solvent fumes). Skin exposure should not occur.

Solvent vapours can cause headaches, dizziness and nausea.

Containment is the recommended approach.

Chlorinated solvent vapours also damage gas burners. Make sure a CORGI-registered engineer makes regular checks of gas-fired equipment.

Other health risks are associated with dry cleaning, especially when workers spend long periods doing one job (eg steam pressing, lifting clothes onto hangers). These jobs can lead to upper limb disorders. Rotate such jobs, if possible.

For environmental advice see Further information on back page.

Workplace and access

- ✓ Keep customers away from dry-cleaning machines.
- ✓ Keep the workplace well organised, with clear exit routes.

Design and equipment

- ✓ Use well-maintained closed-circuit machines.
- ✓ Keep the workplace well ventilated - 10 to 15 air changes per hour with a through draught.
- ✓ Workers can breathe in most solvent fume when loading the machine. Use machines that draw air in when the door is opened. Otherwise, use a room fan to help disperse fumes.
- ✓ Make sure that the extraction discharges to a safe place. Fumes must not get into other premises.
- ✓ Follow the specified procedures for adding solvent to the machine.
- ✓ You need washing facilities for decontamination after handling products.

Procedures

- ✓ Store products containing chemicals securely in a cool, dry, dark place, capable of keeping in spills. Don't store far more than you need.
- ✓ Put the cap back on the container immediately.
- ✓ Plan what to do in case of a spill. Tell staff what the plan is. Hold practices.
- ✓ Check that authorised staff understand how to empty button traps, clean lint filters and clean the still safely.
- ✓ Don't remove solvent-damp material from the machine. If fabric isn't dry at the end of the cycle, return it to the cage and continue drying. Then rectify the fault before reloading.
- ✓ Seek expert advice on controlling Legionella bacteria if you have a wet cooling tower.
- ✓ Ask customers if work clothing is contaminated with asbestos. If so, direct them to specialist cleaners.
- ✗ Never pour waste or still residues down the drain. Collect it for recycling.

Special care

- The solvent perchloroethylene (tetrachloroethylene) may cause cancer and other harmful health effects, and will harm the environment.
- Get a 'solvent precaution notice' from your solvent supplier and display it for workers.
- Evacuate the premises and call the fire brigade if you have a large spill of solvent or a leak of hot solvent.

Maintenance

- ✓ Employ a competent engineer to maintain your machine, in accordance with the manufacturer's instructions.

- ✓ Keep equipment in effective and efficient working order.
- ✓ If the equipment is faulty, stop work until it is repaired.
- ✓ Check for leaks regularly – use a leak detector.

Cleaning and housekeeping

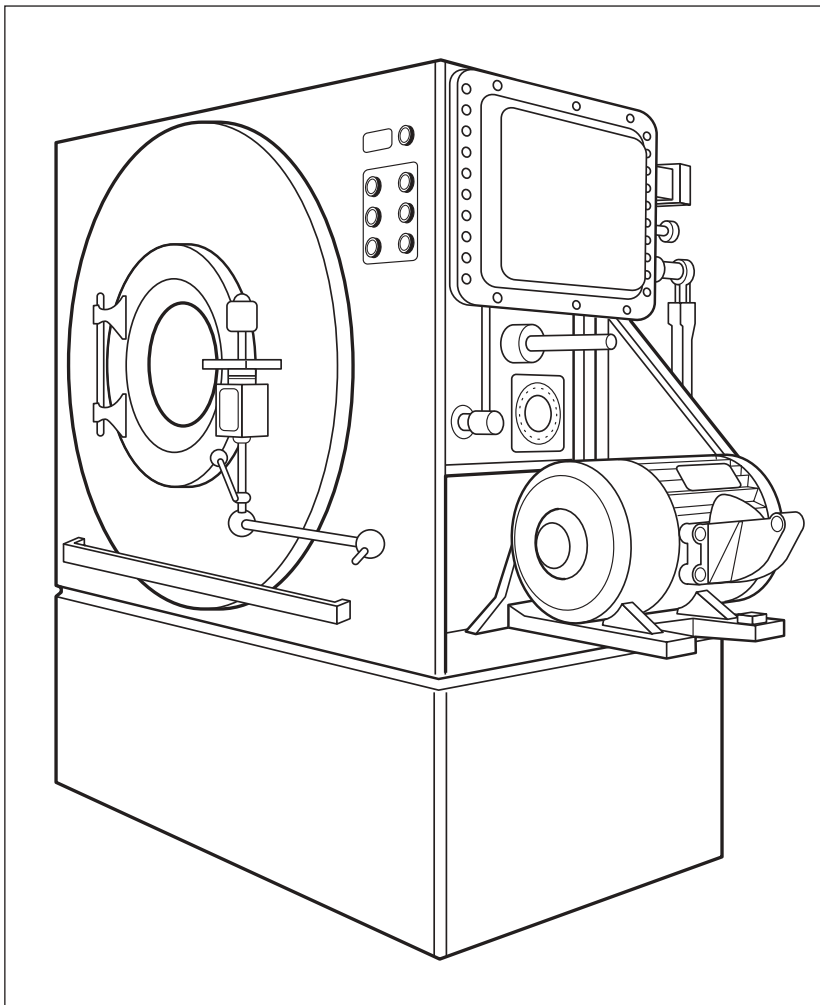
- ✓ Deal with smaller spills of cold solvent immediately. Use a spillage blanket and recover the solvent as soon as possible.
- ✓ Keep a solvent-soaked spillage blanket in a strong polythene bag until you can recover the solvent in the machine.
- ✓ For larger spills and hot solvent, see Special care.
- ✓ Dispose of waste through a specialist contractor.

Personal protective equipment (PPE)

- ✓ Evacuate the premises in case of a larger or hot solvent spill. Use respiratory protective equipment (RPE) only if you have been trained to do so. Seek advice from your RPE supplier.
- ✓ Skin creams are important for skin protection and help in washing contamination from the skin. These are **not** 'barrier creams'. After work creams help to replace skin oils.

Health advice

- ✓ Ask your workers to check their skin for dryness or soreness every six months. If these effects appear, check the proper use of skin creams and PPE.

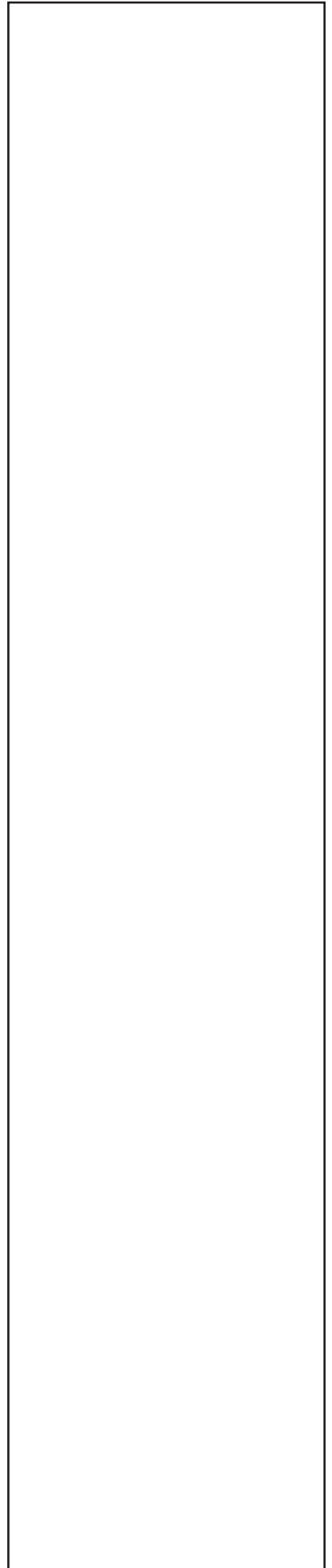


Training

- ✓ Show your workers this sheet and check that they understand it.
- ✓ Tell them about the risks of using the product - see product labels or Section 15 of the safety data sheet from your product supplier.
- ✓ Ensure training includes the safe operating procedures for the machine, how to use and look after PPE and RPE, and what to do if something goes wrong.
- ✓ Make sure everyone knows how to clear up spills promptly and safely.
- ✓ Train and authorise someone to clean traps, filters and stills safely.

Supervision

- ✓ Check that:
 - the extraction is working properly;
 - safe operating procedures are observed;
 - PPE is being used properly; and
 - the rules on personal hygiene are being followed.



Further information

- *General ventilation in the workplace: Guidance for employers* HSG202 HSE Books 2000 ISBN 0 7176 1793 9
- *The selection, use and maintenance of respiratory protective equipment: A practical guide* HSG53 (Second edition) HSE Books 1998 ISBN 0 7176 1537 5
- *Health, safety and environment management guidelines* Textile Services Association 1999 available from TSA on 020 8863 7755 or via www.tsa-uk.org
- *A clean bill of health: Health and safety in the dry cleaning industry* Video HSE Books 2003 ISBN 0 7176 2166 9
- *Drycleaners: Are you in control? Health and safety in drycleaning* Leaflet INDG310 HSE Books 2000 (single copy free or priced packs of 15 ISBN 0 7176 1710 6)
- *Preventing dermatitis at work: Advice for employers and employees* Leaflet INDG233 HSE Books 1996 (single copy free or priced packs of 15 ISBN 0 7176 1246 5)
- *Legionnaires' disease: A guide for employers* Leaflet IAC27(rev2) HSE Books 2001 (single copy free or priced packs of 15 ISBN 0 7176 1773 4)
- Health and safety consultants: the BOHS Faculty of Occupational Hygiene keeps lists of qualified hygienists who can help you. Contact BOHS on 0133 229 8087 or at www.bohs.org/

Depending on the scale of work, solvent releases into the atmosphere may be regulated within the pollution prevention and control (PPC) framework. You should consult your local authority or the Environment Agency. In Scotland consult the Scottish Environment Protection Agency (SEPA). They will advise you if PPC legislation applies to your company, and about air cleaning and discharging emissions into the air. Otherwise, minimise emissions into the air.

Employee checklist

- Look for signs of leaks, wear and damage.
- Check that your RPE works properly every time you put it on.
- If you find any problems, tell your supervisor. Don't just carry on working.
- Wash your hands after use, and before and after eating, drinking, smoking and using the lavatory.
- Never clean your hands with concentrated cleaning products or solvents.
- Make sure you know what to do if there is a spill of solvent.
- Check your skin regularly for dryness or soreness - tell your supervisor if these symptoms appear.
- Use skin creams provided as instructed.



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