

# SR18

## COSHH essentials for service and retail



This information will help employers (including the self-employed and franchisees) comply with the Control of Substances

Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure and protect workers' health.

It is also useful for trade union safety representatives.

This sheet describes good practice using general ventilation.

It covers the points you need to follow to reduce exposure to an adequate level.

It is important to follow all the points, or use equally effective measures.

### Main points

- Battery charging gives off flammable gas - hydrogen - that carries sulphuric acid mist into the air.
- Check that the controls are being used properly.

# Charging batteries for electrically powered vehicles

## Control approach 1 General ventilation

### Access and premises

- ✓ Restrict access to those people who need to be there.
- ✓ Provide good washing facilities.

### Equipment

- ✓ Use the correct charging unit and follow the maker's instructions.
- ✓ The power controller should be accessible from outside the charging area.
- ✓ Keep the workplace well ventilated; 5-10 air changes per hour, with a through draught. A high-level extractor or louvres will help in removing hydrogen.
- ✓ Keep a spill clean up kit nearby. Ask your supplier for advice.

### Personal protective equipment (PPE)

- ✓ You may need respiratory protective equipment (RPE) against acid mist emissions. Seek advice from your RPE supplier.
- ✓ Provide coveralls or work clothing to protect skin from contamination.
- ✓ Provide protective gloves - single-use nitrile gloves are acceptable. If you must use latex gloves, use only 'low-protein, powder-free' gloves.
- ✓ Throw away single-use gloves every time they are taken off.
- ✓ Provide protective goggles to protect eyes when using products that can cause burns (eg acids or caustics).
- ✓ 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.

### Procedures

- ✓ Top up the battery to the correct level and adjust any vent plugs.
- ✓ Raise the battery cover to help disperse hydrogen and switch off all electrical circuits before connecting or disconnecting batteries.
- ✓ Store battery fluids securely in a cool, dry place that is capable of retaining spills.

**Caution: Never exceed the recommended rate of charging. Don't rest metal objects (eg tools) on top of a battery.**

### Special Care

- ✓ Battery acid will burn skin, eyes and any clothing it contacts. Sulphuric acid mist has been associated with cancer.

### Maintenance, examination and testing

- ✓ Follow instructions in maintenance manuals - keep equipment in effective and efficient working order.
- ✓ If the equipment is faulty, get it repaired immediately

### Health monitoring

- ✓ 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.

### Cleaning and housekeeping

- ✓ Keep the work area clean.
- ✓ Clean up spills promptly - practise how to do this.
- ✓ Dispose of hazardous waste through a specialist contractor.

### Training and supervision

- ✓ Tell workers about the risks of using the product - see products labels or Section 15 of the safety data sheet.
- ✓ If products can cause skin or eye damage, plan how to give first aid.
- ✓ Working in the right way and using the controls correctly is important for exposure control. Train and supervise workers. See sheet SR0.

### Further information

- *Electric storage batteries: Safe charging and use* Leaflet INDG139 HSE Books 1993 (single copy free Web version available at [hse.gov.uk/pubns/indg139.htm](http://hse.gov.uk/pubns/indg139.htm))

### Useful links

- HSE priced and free publications are available from HSE Books  
Tel: 01787 881165 Website: [www.hsebooks.co.uk](http://www.hsebooks.co.uk).
- For information about health and safety ring HSE's Infoline Tel: 0845 345 0055 Textphone: 0845 408 9577 e-mail: [hse.infoline@natbrit.com](mailto:hse.infoline@natbrit.com).
- Contact the British Occupational Hygiene Society (BOHS) on 01332 298101 or at [www.bohs.org](http://www.bohs.org) for lists of qualified hygienists who can help you.

### Employee checklist

- Clear up spills immediately.
- If you find any problems, tell your supervisor. Don't just carry on working.
- Throw away single-use gloves every time you take them off.
- Wash your hands after use, and before and after eating, drinking, smoking and using the lavatory.
- Check your skin regularly for dryness or soreness - tell your supervisor if these symptoms appear.
- Use skin creams provided as instructed.

This guidance is issued by the Health and Safety Executive. Following the guidance is not compulsory 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 as illustrating good practice.