
COSHH essentials: Respiratory protective equipment (RPE)

This information will help employers comply with the Control of Substances Hazardous to Health Regulations 2002 (COSHH), as amended, to control exposure to chemicals and protect workers' health.

It is also useful for trade union safety representatives.

The sheet covers how to select and use RPE with a UK APF of 2000.

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

RPE is not a substitute for engineering controls. It is difficult to use, expensive in the longer run, and always fails to danger.

If you are using the right controls, RPE is not normally needed. However, some processes always need RPE.

You should use RPE:
- while you are planning to install engineering control;
- clearing up a spillage;
- maintenance;
- emergencies;
- cleaning, eg pressure washing;
- a short term one-off procedure; and
- whenever required for safe working.

Selection of RPE with an APF of 2000 or more

✓ RPE is designed to help protect workers from dusts, fumes, vapours or gases. This sheet describes breathing apparatus (BA) that supplies clean air. Fill in the selection table on page three and show it, with safety data sheets, to your RPE supplier.

Types of RPE available are:
- positive demand compressed airline BA with full face mask EN 139; and
- positive demand full face mask self-contained BA (SCBA) EN 137.

Planning and preparation
✓ Plan for and practice emergency procedures.
✓ Get up-to-date safety data sheets for all chemicals and products.
✓ Make sure you get initial fit testing done. Ask the supplier for help in fit testing and arranging training, or contact BOHS - see ‘Further information’.
Respiratory protective equipment (RPE)  R6 - APF2000

Using RPE
✓ Wearers must be medically fit to wear RPE – seek medical advice if you are not sure.
✓ All types of RPE restrict what the wearer can do. It is uncomfortable to wear, particularly for long periods of time.
✓ The RPE has to be worn all the time, and until the wearer is away from the contaminated air.
✓ The RPE needs to fit the person. If the RPE depends on a face seal, it won’t work if the worker has face hair or stubble.
✓ Users should check the fit every time they put on RPE.
✓ Make sure the air supplied to breathing apparatus is fit to breathe, free of oil, water, carbon monoxide and other fumes. Take care not to trip over BA air hoses.

Maintenance
✓ Keep RPE clean and in good working order – follow the manufacturers’ instructions.
✓ Maintain RPE at least once every three months. Replace valves, face seals and worn or damaged parts on respirators. The valves need changing frequently if substances such as paint sprays land on them.
✓ Store RPE in a safe place, away from contamination.
✓ Keep a small stock of replaceable parts.
✓ Remember to check the expiry dates on RPE.
✓ Check the air quality to air-fed RPE at least once every three months, or before use, and check the air flow every time. Make sure compressors (including mobile compressors) take in only clean air.

Training
✓ Make sure that RPE users know how to check their equipment is working properly before they put it on, how to check face fit, how to replace worn or defective parts, and know about the RPE’s limitations.
✓ Tell workers to stop work and leave the area if they think their RPE isn’t working properly.
✓ Your RPE supplier may be able to advise you on training.

Further Information
■ Respiratory protective equipment at work: A practical guide
■ Contact the British Occupational Hygiene Society (BOHS) on 01332 298101 or at www.bohs.org for lists of qualified hygienists who can help you.
Selection of RPE
Fill in the selection table below and show it, with safety data sheets, to your RPE supplier.

### Information to help your RPE supplier

<table>
<thead>
<tr>
<th>Task / Job name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemicals used</strong>&lt;br&gt;(Section 2 of safety data sheet)</td>
<td></td>
</tr>
<tr>
<td>Physical form</td>
<td>☐ Gas ☐ Fume&lt;br&gt;☐ Mist ☐ Vapour ☐ Dust</td>
</tr>
<tr>
<td>If a liquid, water or solvent based?</td>
<td>☐ Water ☐ Solvent ☐ Not sure</td>
</tr>
<tr>
<td>Is the humidity high?</td>
<td>☐ Yes ☐ No ☐ Not sure</td>
</tr>
<tr>
<td>How long does the task take?</td>
<td>___ hours ___ minutes</td>
</tr>
<tr>
<td>Confined space?</td>
<td>☐ Yes ☐ No ☐ Not sure</td>
</tr>
<tr>
<td>Explosive / flammable in air</td>
<td>☐ Yes ☐ No ☐ Not sure</td>
</tr>
<tr>
<td>Work rate</td>
<td>☐ Heavy ☐ Medium ☐ Light</td>
</tr>
<tr>
<td>Space to do task</td>
<td>☐ Restricted ☐ Unrestricted</td>
</tr>
<tr>
<td>Amount of moving around</td>
<td>☐ One place ☐ Many places</td>
</tr>
<tr>
<td>Vision requirement</td>
<td>☐ All round ☐ Not relevant</td>
</tr>
<tr>
<td>Spoken communication</td>
<td>☐ Necessary ☐ Not relevant</td>
</tr>
<tr>
<td>Wearer's physical fitness</td>
<td>☐ OK ☐ Not sure (ask a doctor)</td>
</tr>
<tr>
<td>Wearer's aspect</td>
<td>☐ Face hair ☐ Spectacles ☐ Turban</td>
</tr>
<tr>
<td>What other PPE worn?</td>
<td>☐ Hard hat ☐ Ear muffs&lt;br&gt;☐ Visor ☐ Goggles</td>
</tr>
</tbody>
</table>