Selection and use of RPE: Protection Factor 10

Supplementary advice

When to 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.

Selection of RPE
✓ RPE is designed to help protect workers from dusts, fumes, vapours or gases.
✓ This sheet describes respirators (including ‘dust masks’) that filter contaminated air, and breathing apparatus (BA) that supplies clean air.
✓ Get an up-to-date safety data sheet for all chemicals and products.
✓ Fill in the selection table and show it, with Safety Data Sheets, to your RPE supplier.

Types of RPE available
✓ Filtering half-mask, EN 149
✓ Filtering half-mask with valve, EN 405
✓ Filtering half-mask without inhalation valves, EN 1827
✓ Half mask EN 140 and filter, or full face mask EN136 and filter
✓ Any of the above devices incorporating a medium efficiency P2 particulate filter, gas filter, or gas and P3 filter
✓ Powered hood model TH1 EN 146/EN 12941
✓ Power-assisted mask model TM1 EN 147/EN 12942
✓ Compressed airline BA LDH1 hood, helmet or visor EN 1835
Make sure you get initial fit testing done for tightly fitting masks. Ask the supplier for help in fit testing and arranging training.

<table>
<thead>
<tr>
<th>Selection of RPE: Information to help RPE supplier</th>
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</thead>
<tbody>
<tr>
<td>Task/job name</td>
</tr>
<tr>
<td>Chemicals used</td>
</tr>
<tr>
<td>(Section 2 of Safety Data Sheet)</td>
</tr>
<tr>
<td>Physical form</td>
</tr>
<tr>
<td>If a liquid, water or solvent based?</td>
</tr>
<tr>
<td>Explosive/flammable in air</td>
</tr>
<tr>
<td>Is the humidity high?</td>
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<tr>
<td>How long does the task take?</td>
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<tr>
<td>Confined space?</td>
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<tr>
<td>Work rate</td>
</tr>
<tr>
<td>Space to do task</td>
</tr>
<tr>
<td>Amount of moving around</td>
</tr>
<tr>
<td>Vision requirement</td>
</tr>
<tr>
<td>Spoken communication</td>
</tr>
<tr>
<td>Wearer’s physical fitness</td>
</tr>
<tr>
<td>Wearer’s aspect</td>
</tr>
<tr>
<td>What other PPE worn?</td>
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</tbody>
</table>

**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 and where appropriate, the air flow, every time they put on RPE.
Change the filters on respirators regularly – your supplier may be able to advise you.

Make sure the air supplied to BA is fit to breathe, free of oil, water, carbon monoxide and other fumes. Take care not to trip over air hoses.

**Maintenance of RPE**

- Keep RPE clean and in good working order – follow the maker’s 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 spray etc lands on them.
- Remember to check the expiry dates on RPE and filters.
- Check the air flow every time, and air quality to air-fed RPE at least once every three months, or before use. For mobile compressors, make sure these take in only clean air.
- Store RPE in a safe place, away from contamination.
- Keep a small stock of replaceable parts.

**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.
- Throw away disposable RPE after one use.
- 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 HSG53*

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.