

HEPA filters

Explain dangers

“HEPA” stands for “high-efficiency particulate aerosol”. HEPA filters can trap the microscopic toxic particles that pass right through ordinary filters.

HEPA filters can protect workers from microscopic particles that can pose a health risk such as an occupational disease or an allergic reaction. This includes

- Dust
- Pollen
- Mould
- Bacteria
- Smoke
- Asbestos.

There are two main applications for HEPA filters:

1. Industrial HEPA vacuum cleaners
2. Negative air filtration units.

HEPA filters can pose problems when they

- are not replaced as required
- are not properly certified.

Identify controls

- Read and follow the manufacturer’s instruction manual.
- If a vacuum or negative air unit requires a HEPA filter, make sure one is installed.
- Follow the manufacturer’s instructions on how and how often to change the filter.
- Used filters will be contaminated with toxic substances. When inspecting or replacing filters, do so in a safe, well-controlled place and wear proper personal protective equipment (PPE) and clothing.
- PPE may include the following:
 - N100 NIOSH-approved air-purifying respirator
 - Dust-resistant safety goggles
 - Disposable coveralls
 - Impervious gloves.

- Use disposable PPE and clothing if possible or clean and decontaminate them after use. Use a HEPA vacuum to remove harmful particles from clothing before going home.
- HEPA filters cannot be cleaned. They must be replaced with new filters approved by the manufacturer.
- Dispose of old filters as contaminated waste.
- Don’t punch holes in HEPA filters or pre-filters when they get clogged.
- Don’t use compressed air to clean old filters or bang old filters to remove accumulated dust. That just releases the dust back into the air.
- Choose power tools and equipment that allow a HEPA vacuum or dust collector to be attached directly to them. This will allow you to clean up while you’re working.
- Clean up as often as possible to prevent harmful contaminants from building up and prevent workers from being exposed.

Filters must be certified by the Institute of Environment Sciences to qualify as HEPA filters.

Filters that pass the certification test are given a number. Test results are recorded on the label.

Demonstrate

Inspect a HEPA filter in front of your crew.

To ensure that the HEPA filter is authentic, look for the label from the Institute of Environment Sciences.

Make sure that the filter is not installed backwards, is properly seated in its housing, and is tightly secured.

Inspect the filter housing for signs of dust that indicate the filter is being bypassed. A HEPA filter is useless if the housing leaks.

Inspect the filter carefully for buildup and damage. If it appears to be clogged or damaged in any way, replace it with a new filter. If you see dust particles in the exhaust air flow, it means the HEPA filter has ruptured or failed and must be replaced.