

Wood working

Information Sheet

November 2010

Hardwood or softwood dusts generated during work processes can be hazardous to your health. Certain machines, e.g. sanding machines, can generate particularly high levels of dust. Wood working can also involve other substances used in processing, which may form aerosols and/or vapours which could include preservatives, adhesives or surface coatings containing formaldehyde, solvents or heavy metals such as arsenic.



Routes of Exposure

Workers may become exposed to timber dusts or chemicals through different routes, the most common being **inhalation** of a dust, aerosol, vapour or mist. Finer dust generally presents a greater risk since it can penetrate further into the lungs. **Skin contact** can occur through the eyes, nose or entry through skin absorption.

Occupational Exposure Limit

An occupational exposure limit value (OELV) of 5mg/m³ (8 hour time weighted average), exists for both hardwood and softwood dusts. This is set down in the HSA Chemical Agents Code of Practice. As a result, employers must reduce their employee's exposure as far as is reasonably practicable and not exceed the OELV.

Health Effects

There are several potential health effects associated with exposure to hard and soft woods. Some examples are provided below:

- Exposure to wood dusts may lead to irritation or inflammation of the respiratory tract (e.g. rhinitis or runny nose, sneezing), asthma or cancer (particularly sino-nasal).
- Allergic reactions and irritation can lead to dermatitis from exposure to fine wood dust of certain species.

Recommended Control Measures

It is the employer's responsibility to assess the risks and level of protection necessary in the workplace. Various different levels of protection may be required depending on the scenario. The following precautions could be taken:

- No consumption of food or drink where work is being carried out.
- Do not launder any protective clothing or PPE at home.
- Engineering control measures such as automating timber treatment processes.
- Good personal hygiene should be practiced and



separate storage areas to prevent the contamination of work clothing to regular clothing.

- The work environment should be well ventilated - dust control equipment should be used such as local exhaust ventilation (LEV) for effective control of dust at source.
- Use a suitable vacuum system/cleaner to clear up dust regularly.
- Respiratory Protective Equipment (RPE) should have at least a P2 particulate filter fitted to a half or full face mask to provide effective protection and be CE marked; particulate respirators will give no protection against gases and vapours, a combination filter would be required to give adequate protection if such substances are involved.
- Any RPE worn should be properly fit tested.

Health Advice

There are preventative measures that can be taken such as:

- ✓ Making respiratory health screening available for all relevant employees.
- ✓ It is important to seek medical advice if there are persistent symptoms and report these to your employer.
- ✓ Making skin checks available for symptoms of dermatitis, these can be carried out by an appropriately trained person.

Key Points

Always assume that exposure is likely to occur and protect according to the level of risk identified from risk assessment.

- ✓ Prepare written risk assessments (required by law) highlighting the key hazards, risks and controls in place.
- ✓ Investigate the possibility of substituting harmful substances for less harmful alternatives.
- ✓ Use safe systems of work to reduce exposure.
- ✓ Routine maintenance of ventilation systems in the wood working sector is important.
- ✓ Use and store personal protective equipment according to instructions to reduce exposure.

Further information:

- The Health and Safety Authority's website www.hsa.ie (search for chemical agents).
- Contact the Health and Safety Authority at wcu@hsa.ie or LoCall **1890 289 389**.

