

Medium density fibreboard (MDF) Hazard Assessment Document

Since the last edition of *WOODNIG NEWS* the Health and Safety Executive (HSE) has published a Hazard Assessment Document for medium density fibreboard (MDF).

MDF is a wood composite material, primarily softwood, bonded with a synthetic resin, which is usually formaldehyde-based. Although it has been commercially available since the 1960s, its use has become significant only in the last decade or so.

The publication of this document follows on from an announcement in October 1997 that HSE would be reviewing the health effects of exposures arising from machining MDF. The review was described in the December 1997 issue of *WOODNIG NEWS* (Issue 9). As part of the review, HSE carried out a hazard assessment and commissioned an exposure survey and research into the characteristics of MDF dust.

The atmosphere created by machining MDF contains a mixture of wood dust (typically 85-100% softwood for MDF manufactured in Great Britain), free formaldehyde, dust particles onto which formaldehyde is adsorbed and, potentially, the resin binder itself and its derivatives.

The publication reports on the scientific evidence for the possible health effects of exposures arising from machining MDF and includes information from the HSE-commissioned research on the atmosphere created during machining.

The document was discussed by the scientific sub-group of the Advisory Committee on Toxic Substances, the Working Group on the Assessment of Toxic Chemicals (WATCH) and both the trade unions and industry were able to present their views on the work that was taking place.

WATCH endorsed the conclusion of the hazard assessment that there is no evidence that the ill-health effects associated with exposure arising from the machining of MDF are different from those associated with similar exposure arising from machining other forms of wood.

There is some evidence for more frequent reporting of respiratory symptoms in workers receiving exposures arising from machining MDF compared to other forms of wood or wood products.

WATCH expressed the view that the most appropriate risk management strategy for MDF is the one currently recommended by HSE. This specifies that:

- the level of dust arising from the machining of MDF should be kept as low as reasonably practicable below the maximum exposure limits (MELs) for softwood dust and hardwood dust; and
- levels of free formaldehyde should be kept as low as reasonably practicable below the MELs for formaldehyde.

Softwood and hardwood dusts each have an 8-hour time weighted average MEL of 5 mg m⁻³ (total inhalable dust), while formaldehyde has MELs of 2 ppm, as an 8-hour time weighted average and as a 15-minute short-term exposure limit.

HSE is also planning to produce some free guidance aimed at those who use MDF at work. It will summarise the conclusions of the Hazard Assessment Document and the recently commissioned research and will provide a guide to working safely with MDF.

Copies of the new publication *Medium density fibreboard Hazard Assessment Document* EH75/1 ISBN 0 7176 1735 1, price £7.50 are available from HSE Books (see back page for details).

New guidance on health surveillance at work

Revised guidance on what employers need to do to meet their legal duty to provide health surveillance at work has recently been published by HSE.

Health surveillance at work (HSG61 ISBN 0 7176 1705 X, price £7.00) describes what is legally meant by health surveillance and how this differs from other steps to monitor employee health. It includes reasons why health surveillance is a valuable means of identifying harm to employee health at an early stage or to evaluate whether health risk control measures are working.

Managed correctly, health surveillance has an important role in preventing employees becoming ill because of the job they do. The publication gives employers the information needed to put in place health surveillance programmes that work. It will also be of interest to employees, safety representatives and occupational health professionals.

Manual handling solutions in woodworking

The August 1999 edition (Issue 14) of *WOODNIG NEWS* included a feature on manual handling injuries in the woodworking industry. Such injuries represent the largest single kind of reported injury in the industry - about 30% of all reported injuries every year.

Having identified the high-risk handling activities, HSE has now published a new leaflet on this topic, *Manual handling solutions in woodworking*. The leaflet explains what needs to be done to comply with the Manual Handling Operations Regulations 1992. The main part of the leaflet, however, is a series of case studies, each describing solutions that can be applied to the most common high-risk handling. The case studies have been collected from all parts of the industry - from timber preservation to pallet, joinery and furniture manufacture.

The new leaflet will form the focus of a major HSE inspection initiative that will be carried out from April 2000. In an attempt to reduce the high numbers of injuries that occur, inspectors will be checking that high-risk handling activities are properly controlled. So, if it is reasonably practicable to reduce risks by applying a solution, then that is what you should do.

A copy of the new leaflet is included with this edition of *WOODNIG NEWS*. Additional copies (INDG318) are available from HSE Books (see back page for details).

In woodworking there are several situations where health surveillance may be appropriate, for example where there is exposure to wood preservatives (particularly CCA), wood dust (eg western red cedar) and noise levels at or above 95 dB(A).

A new free leaflet, *Understanding health surveillance at work: An introduction for employers* (INDG304), helps employers identify whether health surveillance is an issue for them. Copies of both publications are available from HSE Books.

New Woodworking Information Sheet

A copy of the new Woodworking Information Sheet WIS39 *Safe use of single-end tenoning machines* is enclosed with this edition. It describes how over half of all accidents on these machines occur during setting, adjustment, cleaning or clearing blockages and what can be done to prevent them.

Woodworking Industries Forum

On 8 March, HSE held one of its regular Woodworking Industries Forum meetings with representatives from leading industry bodies and trade unions. Members looked ahead to see what health and safety issues should be given priority over the next few years and also discussed the quality and availability of training. There was agreement that the following problems must be addressed if we are to make a significant impact on the levels of ill health and accidents in the industry:

- manual handling;
- exposure to wood dust;
- wood machinery accidents;
- transport and the storage of timber;
- noise and vibration.

They recognised that the priority given to each of these will vary across what is a broad industry. However, everyone present agreed to consider what action their own organisations could take to promote and develop good practice.

Tom Bewick, Policy Director for the NTO National Council, gave a presentation on developments in the structure of post-16 learning and skills. He encouraged participation in the local 'learning and skills council boards' currently being established.

SMALL FIRMS HEALTH AND SAFETY TRAINING LOANS

Are you thinking of organising some training for your new and existing employees? If so, are you aware government-assisted loans are available for employee health and safety training, for businesses with up to 50 employees.

By arrangement with eight designated banks (Bank of Scotland, Barclays, Clydesdale, Co-operative, Lloyds TSB, HSBC, Nat West and Royal Bank of Scotland) a small business can borrow from £500 up to £125 000.

The Government, instead of the borrower, then pays the interest on the loan direct to the bank for a fixed maximum period (the 'repayment holiday'). The length of the holiday depends on the amount of the loan:

- 6 months (26 weeks) for loans of £500- £7000;
- 9 months (39 weeks) for loans of £7001-£15 000; and
- one year (52 weeks) for loans of £15 001-£125 000.

At the end of the repayment holiday, the borrower becomes responsible for any further interest payable and for repayment of the principal sum borrowed.

To be eligible, a business:

- should be already trading or about to trade, with up to (and including) 50 full-time or part-time permanent employees;
- can consist of a sole trader, partnership, co-operative, franchise or limited company; and
- should intend to use its loan only to train individuals with a legal right to live or train in the UK and employ them in the UK or other member states of the European Economic Area.

The total amount borrowed for training costs is limited to a maximum of £10 000 for any individual trainee and to a maximum average of £5000 per trainee.

The scheme was instigated and is run by the Department for Education and Employment. Application forms and information packs may be obtained by phoning 0800 132 660 (7 days a week, except public holidays, 8 am-10 pm). They are also available from local TECs and LECs.

HAVE YOU PUT UP THE NEW HEALTH AND SAFETY LAW POSTER?

There is a new version of the statutory 'Health and safety law' poster and leaflet. Employers are required by the Health and Safety Information for Employees Regulations 1989 either to display an approved poster at a place reasonably accessible to employees while at work or to provide them with the equivalent leaflet.

The purpose of the poster and leaflet is to outline health and safety law to employees. The existing versions have been in use since 1989 but needed updating to take account of European Directives and the Health and Safety Commission's programme of modernising and simplifying the law.

The revised poster and leaflet now draw attention to employers' duties to consult employees or their representatives on health and safety and to key requirements in the Management of Health and Safety at Work Regulations 1999 (eg to assess risks, record significant findings, make arrangements to implement

health and safety measures, appoint someone competent to assist with health and safety responsibilities, co-operate with other employers, and set up emergency procedures).

The poster also includes two new sections which will allow employers to personalise the information. There is now a box for the names and locations of safety representatives, and a similar one for details of competent people appointed by the employer, and their health and safety responsibilities.

Although the existing posters can still be used up to 30 June 2000, from 1 July 2000 only the revised versions should be used.

Copies of the poster *Health and safety law: What you should know*, ISBN 0 7176 2493 5, price £7.50, or the leaflet *Health and safety law: What you should know*, available in packs of 25, ISBN 0 7176 1702 5, price £5.00 can be obtained from HSE Books.

LESSONS TO BE LEARNT?

An antique restoration company was fined £8000 following a fatal accident. An employee suffered burn injuries while using methylated spirits, a highly flammable liquid, to remove stains from a cabinet.

The accident occurred in June last year when the employee was using a technique called 'flashing' to remove oil stains from a wooden cabinet top. This involves igniting a film of methylated spirits which has been applied to the stains on the wood surface. The methylated spirit was being dispensed from a 5 litre plastic container.

During this process, the methylated spirit vapour unexpectedly ignited, causing the employee to spill a significant amount of the liquid onto his clothing which also ignited, causing substantial burns to his legs. He died sixteen days later.

The company were prosecuted under the Health and Safety at Work etc Act 1974 for allowing employees to use an unsafe system of work. Evidence from the other employees involved indicated that the employer was aware of the practice within the company but no steps had been taken to properly inform employees of the dangers and necessary controls regarding methylated spirits and its limitations of use.

All highly flammable liquids must be used with great care. They should be dispensed from 'safety' containers, which limit the amount of liquid dispensed to a slow controlled flow, and all sources of ignition must be carefully controlled. Adequate ventilation is required to ensure that a flammable concentration of vapour does not occur.

The use of highly flammable liquids is governed principally by the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972. Details are given in HSE guidance booklet HSG140 *The safe use and handling of flammable liquids* (available from HSE Books, ISBN 0 7176 0967 7, price £8.50).

Further information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS. Tel: 01787 881165 Fax: 01787 313995. Website: www.hsebooks.co.uk

HSE priced publications are also available from good booksellers.

For other enquiries ring HSE's InfoLine Tel: 08701 545500, or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ. Website: www.hse.gov.uk

NEW PUBLICATIONS FROM HSE

Details of recently produced HSE publications which may be of interest to the woodworking industry are listed below.

Medium density fibreboard (MDF) Hazard Assessment Document EH75/1 HSE Books 1999 ISBN 0 7176 1735 1 (£7.50)

Manual handling solutions in woodworking INDG318 HSE Books 2000 (free)

Safe use of single-end tenoning machines WIS39 HSE Books 2000 (free)

Getting to grips with manual handling: A short guide for employers INDG143(rev1) HSE Books 2000 (free)

Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21 HSE Books 2000 ISBN 0 7176 2488 9 (£8.00)

Managing health and safety on work experience: A guide for organisers HSG199 HSE Books 2000 ISBN 0 7176 1742 4 (£6.50)

Health and safety law: What you should know Poster (new) HSE Books 1999 ISBN 0 7176 2493 5 (£7.50)

Health and safety law: What you should know Leaflet (new) HSE Books 1999 Available in packs of 25 only. ISBN 0 7176 1702 5 (£5.00)

Good health is good business: Employers' guide. Phase 4 MISC196 HSE Books 1999 (free)

Dermal exposure to non-agricultural pesticides: Exposure assessment document Guidance Note EH74/3 HSE Books 1999 ISBN 0 7176 1718 1 (£7.50)

All these publications are available from HSE Books.

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What do you think of **WOODNIG NEWS**?
What would you like to see in future editions?
Send your views to Chris Molde at the address below.

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WOODNIG NEWS is produced by the HSE's Woodworking National Interest Group based at the National Agricultural Centre, Stoneleigh, Kenilworth, Warwickshire CV8 2LZ.