

Current revision-- Revision 3 November 2002.  
First issued 17 November 1997

## 1. Identification of the substance/ preparation and Company.

Product name: *Caberfloor, Caberdek.*

Product type: Chipboard particleboard

Product description:

Particleboard is an engineered panel product in which particles of wood are bonded together to form a panel. It is formed using a synthetic resin adhesive (urea formaldehyde or melamine urea formaldehyde) and historically these panels have been known in the UK as chipboard. Particleboard is most commonly made from softwood chips though hardwoods are sometimes used. All chipboard manufacturers in the UK use recycled wood fibre as well as fresh chips, this is a good process for recycling used wood products.

The chips are dried and mixed with an adhesive that is appropriate to the product's end-use i.e. melamine urea formaldehyde resin for moisture resistant products as it is more stable when wet. The chips are formed into a mat and are then pressed between heated platens to compress and cure the panel. The finished panels are then sanded and cut to size.

The current British Standards for specifying particleboard are:

- "BS EN 312-1:1997 Particleboards – Specifications". Part 1. General requirements for all board types".
- "BS EN 312-2:1997 Particleboards – Specifications". Part 2. Requirements for general purpose boards for use in dry conditions.
- "BS EN 312-3:1997 Particleboards – Specifications". Part 3. Requirements for boards for interior fitments (including furniture) for use in dry conditions.
- "BS EN 312-4:1997 Particleboards – Specifications". Part 4. Requirements for load bearing boards for use in dry conditions.
- "BS EN 312-5:1997 Particleboards – Specifications". Part 5. Requirements for load bearing boards for use in humid conditions.
- "BS EN 312-6:1997 Particleboards – Specifications". Part 6. Requirements for heavy-duty load-bearing boards for use in dry conditions.
- "BS EN 312-7:1997 Particleboards – Specifications". Part 7. Requirements for heavy-duty load-bearing boards for use in humid conditions.

Application:

Building, furniture components, decorative fixtures and fittings, for dry internal and moisture resistant applications. See product literature.



## 2. Identification/ information on ingredients.

No materials identified for this purpose as specified in section 5(3) of 'The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002.

## 3. Hazards identification

Physical hazard                      Non-classifiable  
Health hazard                        Non-classifiable  
No risk phrases required

## 4. First aid measures.

**INHALATION:**            Inhalation of dust can only occur during processing. If inhalation of dust causes adverse effects, remove to fresh air. If discomfort persists, seek medical advice.

**SKIN CONTACT:**        In case of irritation from dust generated from processing, wash with water.

**EYE CONTACT:**        If particles enter the eyes during processing, immediately flush eyes with plenty of water. Seek medical attention if irritation persists.

## 5. Fire-fighting measures

Non-flammable at room temperature, but will burn. In case of fire, soak (flood) with water. For large fires, fire fighters should wear full emergency protective equipment including self-contained breathing apparatus. Wood waste, or dust may present a fire or explosion hazard- good house keeping practices must be followed.

## 6. Accidental Release Measures

Chipboard does not represent a hazard in sheet form. However dust generated from processing should be contained, carefully collected and removed.

## 7. Handling and Storage

### a. Manual Handling

In sheet form, chipboard can present a manual handling risk due to its physical dimensions and weight. Good lifting practice should be followed.

Note: A 2440 mm by 1220 mm (8' x 4') sheet of 18 mm (3/4") standard chipboard weighs approximately 35 kg (77 lbs).

### b. Storage

Keep away from heat, sparks, flame and other ignition sources. Store at room temperature. Keep away from moisture. Take care during removing packaging, especially steel banding.

### c. Stacking

The ground should be flat and even with a minimum of sloping, recommended maximum 2°.

Ground should be strong enough to withstand the weight of the packs and the machinery. It should be well consolidated and not affected by adverse weather conditions such as rain.

Clear any obstacles such as waste timber or unused bearers from the stacking area as they make stacks unstable.

Stacks outside may be affected by wind, make sure the stack is secure, if possible construct the stack so that a small cross section is facing the prevailing wind. Securely attach any protective sheeting. Bearers need to be straight and identical in length.

Vertically stacked packs should be of the same size or reduce in size up the stack, avoid overhangs. *Further in formation is available on HSE information sheet 'Safe stacking of sawn material and board materials'*



## 8. Exposure Controls/ Personal Protection

**Health** – the following health problems are among the effects that have been associated with exposure to wood dust.

Skin disorders  
Obstruction in the nose and rhinitis;  
Asthma  
a rare type of nasal cancer

### a. Exposure Controls

During processing, adequate ventilation and/ or extraction should be provided to minimise airborne dust.

Whenever possible, fit dust extraction equipment even when using hand-held machines.

### b. Personal Protection

Dust will be created during processing; use appropriate (Dust masks to at least EN 149 type FFP2) respiratory protection equipment. Wear gloves and overalls as required to prevent skin contact. Wear eye protection to prevent dust particles from entering eyes.

Wear the correct clothing and use other safety equipment as necessary

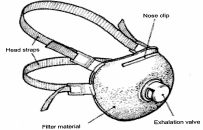
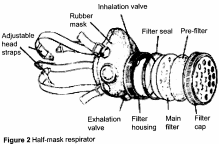
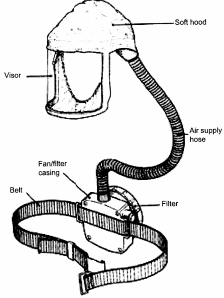
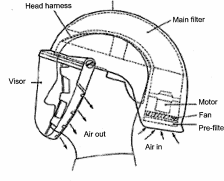


# Caberboard Material Safety Data Sheet

Norbord Ltd  
 Station Road, Cowie  
 Stirlingshire, FK7 7BQ  
 Scotland UK  
 Phone: +44 (0) 01786 812921  
 Fax: +44 (0) 1786 817143



[www.norbord.com](http://www.norbord.com)

|  |  |  |   |
|--|--|--|---|
| <p><b>Respirator type</b></p>  | <p>Machining (e.g. routing, planning, lathe work and saws).<br/>                 Hand sanding (e.g. disc, bobbin, pad and portable machines).<br/>                 Assembly and handling of dusty materials.<br/>                 Work involving the use of MDF.</p> | <p>Changing dust collection bags on simple recirculating dust collectors in the workplace.</p> | <p>Entry into dust collection rooms/ vaults.<br/>                 Entry into very dusty filter galleries for bag changing. Work outside heavily contaminated ducts.</p> |
| <p><b>Disposable respirator</b></p>  <p>Figure 1 Disposable filtering facepiece respirator</p>  | <p>EN 149 type FFP2</p>  | <p>EN 149 type FFP3</p>  | <p>Not suitable</p>   |
| <p><b>Half mask respirator</b></p>  <p>Figure 2 Half mask respirator</p>  | <p>Filter to EN 143 - P2<br/>                 Half mask to EN 140 or full face mask to EN136</p>   | <p>Filter to EN 143 - P3<br/>                 Mask to EN 140 or full face mask to EN136</p>    | <p>Filter to EN 143 - P3<br/>                 Mask to EN 140 or full face mask to EN136</p>   |
| <p><b>Lightweight powered visor or powered hood</b></p>  <p>Figure 3 Lightweight powered visor</p>  <p>Figure 4 Powered helmet</p> | <p>EN 12941-TH1</p>  | <p>EN 12941 – TH2</p>  | <p>EN 12941 – TH2</p>   |

Additional information is available from the Health and Safety Executive, 'The selection use and maintenance of respiratory protective equipment; a practical guide' HSG53 HSE books 1998, and 'Selection of respiratory protective equipment suitable for use with wood dust' WIS14 HSE books 1991.

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**AREAS OF EXPERTISE**

- Safety
- Cost management
- Capability assurance
- Supply chain management
- Managing beyond customer expectations

## 9. Physical and Chemical Properties

Appearance: Wood sheets in various dimensions

Odour: None under ambient conditions

## 10. Stability and Reactivity - Considered stable and inert in sheet form

### a. Materials to avoid:

Reducing and oxidising agents.

### b. Conditions to avoid:

Heating and ignition sources and damp atmospheres.

### c. Thermal decomposition products may include:

CO, CO<sub>2</sub>, aldehydes (including formaldehyde, HCHO) particulate matter and other organic compounds.

### d. Other Hazards:

Processing of chipboard will generate wood dust. Appropriate protection from inhalation of the dust is recommended. See section 8; also refer to 'Safe collection of wood waste: Prevention of fire and explosion.' WIS32 HSE Books 1997 and 'Safe handling of combustible dusts' HSG103 HSE books 1994.

## 11. Toxicological Information

In bulk wood is unlikely to give rise to toxicological effects; the hazardous forms that may give rise to health risks are dust and sap, latex or lichens associated with the wood.

### a. Immediate Hazards

INHALATION: Dust generated during processing may cause irritation of the nose and throat.

SKIN: Dust generated during processing may cause irritation.

EYES: Dust generated during processing may cause irritation.

Chipboard is largely composed of softwood bound together usually with a urea formaldehyde or melamine urea formaldehyde resin. When it is machined, dust is produced. Just like "natural" wood dust this is a potentially hazardous substance and it must be controlled.

For example wood dust can cause skin disorders and asthma.

Hardwood dust in particular can, very rarely, cause nasal cancer - and as such is classified as a carcinogen in Control Of Substances Hazardous to Health (COSHH) Regulations.

The evidence that softwood dust can cause cancer is less conclusive. It is not classified as a carcinogen in the UK.

However, all wood can cause irritation and we draw your attention to the guidance given in *HSE woodworking sheet no 30 Toxic woods*.

Under COSHH Regulations, softwood dust has a maximum exposure limit (MEL) of 5 mg/m<sup>3</sup> (8 hr TWA)- this is the relevant limit for controlling exposure to chipboard dust. Exposure must be reduced as far as is reasonably practicable below this limit - usually with properly designed and maintained dust extraction equipment fitted to woodworking machines. When using portable or hand-held tools, extraction equipment often is not practicable or available, in which case a suitable dust mask should be worn. If possible MDF should be machined in a well-ventilated workplace, for example outside.



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Formaldehyde also has a MEL of 2 parts per million (PPM). Formaldehyde vapour can irritate the eyes, and nasal linings. It can be quite irritating to unaccustomed or susceptible persons. Studies to date indicate that persons machining MDF are not exposed to formaldehyde vapour at levels that adversely affect health. Exposure levels measured by HSE and other investigators have always been well below the MEL.

Free formaldehyde levels from particleboards are closely monitored and controlled. The current levels are E1 less than or equal to 8 mg/100g (0,008 %) of board and E2 greater than 8 mg/100g but less than or equal to 25 mg/100g of board (>0.008% □0.025%, this is tested using EN 120 as the test standard.

## b. Delayed Hazards

Skin eczema can take up to 15 weeks to develop for persons susceptible to dust irritation.

## 12. Ecological Information

Mobility: The dust from processing is highly mobile especially when airborne.

Degradability: Biodegradable as for wood.

Bio accumulative potential: Not determined.

Aquatic toxicity: Toxicity to bacteria, algae and higher marine organisms not tested.

## 13. Disposal Considerations

Manufacturing waste must be disposed of as a controlled waste. Special consideration should be given to containing dust to prevent spillage during transit.

## 14. Transport Information

UK Supply Classification: Non-classifiable.  
UK Carriage Classification: Non-classifiable.  
UK Conveyance Classification: Non-classifiable.

UN Number: None.

## 15. Regulatory Information

Label Information:

UK Supply Classification: Non-classifiable  
UN Number: None.

Other Regulations:

This Material Safety Data has been compiled in accordance with:-

“The **C**hemicals (**H**azard **I**nformation and **P**ackaging for **S**upply) Regulations 2002”.

Transport, storage, use and disposal of the material should be in accordance with the following additional legislation/publications, where applicable: COSHH Regulations 1994 SI 3246 and Amendments Environmental Protection Act 1990 Environmental Protection (Duty of Care) Regulations 1992 SI 2839 EH40 Occupational Exposure Limits

Note: This list may not be exhaustive and users should satisfy themselves that they comply with all the relevant and latest issue national legislation.

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## 16. Other Information

Clean up every day

Clean up frequently using vacuum cleaning equipment with high-efficiency filters. Don't use compressed airlines for cleaning down machines, work pieces or clothing and don't use brushes to sweep up - they create dust clouds. Dispose of waste carefully.

Further technical information can be obtained from

### Norbord Ltd.

Station Road

Cowie

Stirling

Scotland

FK7 7BQ

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