

# MATERIAL SAFETY DATA SHEET

January 1994

## Rex Lumber Company

Main Office, 840 Main Street • Acton, Massachusetts 01720-5804  
(508) 263-0055

### **WOOD DUST, HARDWOODS & SOFTWOODS**

*Examples:* Oak, Maple, Hickory, Beech, Poplar, Birch Mahogany, Walnut, Ash, Pine, etc: OHS88900

**CERCLA RATINGS** (Scale 0-3): Health = 3, Reactivity = 0, Persistence = 0

**NFPA RATINGS** (Scale 0 - 4): Health = 3, Fire = 3, Reactivity = 0

---

### COMPONENTS AND CONTAMINANTS

**COMPONENT:** Wood Dust (General) Hardwoods, Softwoods, Special Note: Western Red Cedar

**PERCENT:** 100.0

**EXPOSURE LIMITS:** Hardwood and Softwood Dust

**DUST - HARDWOOD & SOFTWOOD:** 5mg/m<sup>3</sup> ACGIH TWA - except Western Red Cedar 2.5mg

---

### SPECIAL NOTE: "PEL" AND "TLV" LIMITS

The Eleventh Circuit of the U.S. Court of Appeals vacated the permissible exposure limits that OSHA issued January 19, 1989. They have ceased enforcement of the 1989 PELs and have reverted to enforcement of the previous limits.

The section in the Federal Register entitled Organic Dusts of the August 5, 1993 memorandum give specifics for the wood dust PEL. Wood dust will be regulated under the classification Particulates Not Otherwise Regulated (PNOR) and will have a PEL of 15mg/m<sup>3</sup> as an eight hour weighted average.

An explanation of the term Threshold Limit Value (TLV). This is the exposure limit recommended by a private professional association called the American Conference of Governmental Industrial Hygienists (ACGIH). These are recommended only and do not carry the weight of the law. HOWEVER, the Hazard Communication Standard requires that this TLV as well as the PEL be listed on your MSDS forms. At present, the TLV for hardwood is one milligram per cubic meter (1mg/m<sup>3</sup>) of air and the TLV for softwoods is five milligrams per cubic meter (5mg/m<sup>3</sup>). Both of these is on the eight hour weighted average concentration.

---

### EMERGENCY TELEPHONE NUMBER

**(800) 424 - 9300 CHEMTREC**

---

### PHYSICAL DATA

**DESCRIPTION:** Dust of varying size, odor, texture and color.

---

### FIRE AND EXPLOSION DATA

**FIRE AND EXPLOSION HAZARD:** The finely divided wood dust presents a dangerous fire and explosion hazard when exposed to heat or flame. The larger dusts present a moderate to dangerous fire and explosion hazard when exposed to heat or flame.

**FIRE FIGHTING MEDIA:** Dry chemical, carbon dioxide, water spray or foam (1984 emergency response guidebook, DOT P 5800.3). For larger fires, use water spray, fog or foam (1984 emergency response guidebook, DOT P 5800.3).

**FIRE FIGHTING:** Move container from fire area if possible. Do not scatter spilled material with more water than needed for fire control. Dike fire control water for later disposal (1984 emergency response guidebook, DOT P 5800.3, Guide Page 31). Use agents suitable for type of surrounding fire. Avoid breathing hazardous vapors, keep upwind.

---

---

## TOXICITY

Positive human carcinogen (IARC, NTP) (Furniture and cabinet making industry). An excess risk of nasal adenocarcinoma has been reported in workers in this industry. This excess risk occurs mainly in those that are exposed to wood dusts.

Some studies have suggested that the incidence of nasal cancers and Hodgkin's disease may be increased in workers in the lumber and sawmill (including logging), carpentry and joinery trades and the pulp and paper industries. Wood dust is an eye, skin and mucous membrane irritant and a skin sensitizer.

---

---

## HEALTH EFFECTS AND FIRST AID

### **INHALATION:** Irritant/Sensitizer/Carcinogen

Acute exposure, depending upon the species of tree, inhalation of wood dust may cause symptoms ranging from sneezing, coughing, rhinorrhea, fever, muscular aches and pains, labored breathing, nasopharyngitis, laryngitis, and bronchitis. The irritation caused by some wood dusts may cause sinus inflammation and nose bleeds. These symptoms have been attributed to an allergic type reaction and appear to be very species specific. Pulmonary sensitization to specific species has been documented. Pneumonitis or extrinsic allergic alveolitis may also occur among individuals that are susceptible to the wood dust. Studies have shown that this condition may be caused by the wood dust itself. There is the possibility that microorganisms inhabiting the wood may also be responsible for causing this condition in some individuals. Many of the more exotic woods have been reported to cause nausea and vomiting following inhalation, these woods have also been reported to cause dizziness, giddiness and cardiac arrhythmia's.

Chronic exposure, repeated or prolonged exposure, may result in asthma and/or rhinitis. Studies have shown that occupational asthma is the result of irritation of the dust. Many woods are composed of biologically active chemical agents and these agents may play a role in causing the asthma's. Cases of pulmonary fibrosis have been reported in individuals with long term exposure to wood dust. Nasal carcinomas, especially adenocarcinoma, have been documented in workers in the furniture and cabinet-making industries. This excess risk occurs mainly in those exposed to wood dust. An increase in Hodgkin's disease has been seen in other industries that are involved in woodworking, especially sawmills. Wood dusts appear to produce a mucostatic effect on the body. A study has suggested that this mucostatic action may be of importance in the development of nasal adenocarcinomas in furniture workers because of the prolonged retention of wood dust in the nasal cavity.

**FIRST AID:** Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Get medical attention immediately.

### **SKIN CONTACT:** Irritant/Sensitizer

Acute Exposure - All wood dusts have been implicated in causing irritation. This irritation may be the result of mechanical means and/or chemical agents. Mechanically caused irritation is the result of dust particles being trapped in the clothes of the worker and producing abrasions. The chemical agents may cause contact dermatitis with redness, scaling and itching. Severe cases may progress to blistering of the skin. The areas that are most often affected are the face, eyelids, hands and forearms. Splinters from some hardwoods may produce septic wounds that may take an extremely long time to heal.

Chronic exposure, repeated or prolonged exposure, may result in allergic dermatitis. Sensitization reactions may be mild with only erythema and irritation, but more often there is vesicular or papular dermatitis which may progress to chronic dermatitis.

**FIRST AID:** A thorough cleansing of the body, each day as a minimum, is necessary in the prevention of adverse reactions to wood dust. Any wound resulting from splinters or abrasions should be cleaned thoroughly. Splinters should be removed as quickly as possible by qualified medical personnel. If an infection from a splinter would occur, seek prompt medical attention. Remove and wash contaminated clothing at the end of each day.

### **EYE CONTACT:** Irritant.

Acute exposure - Direct contact with wood dust may cause irritation and inflammation. Mechanical damage of the cornea may also occur.

Chronic exposure, repeated or prolonged exposure, may cause conjunctivitis.

**FIRST AID:** Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

**INGESTION:** Acute exposure - No data available. Chronic exposure - No data available.

**FIRST AID:** Treat symptomatically and supportively. Get medical attention immediately. If vomiting occurs, keep head lower than hips to prevent aspiration.

**ANTIDOTE:** No specific antidote. Treat symptomatically and supportively.

---

---

### REACTIVITY

**REACTIVITY:** Stable under normal temperatures and pressures.

**INCOMPATIBILITIES:** Strong oxidizers: Fire and explosion hazard.

**DECOMPOSITION:** Thermal decomposition products may include toxic oxides of carbon.

**POLYMERIZATION:** Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

### CONDITIONS TO AVOID

Finely divided dusts may ignite easily. Larger dusts usually require longer exposure time to heat a flame before ignition occurs.

---

---

### SPILL AND LEAK PROCEDURES

**OCCUPATIONAL SPILLS:** No special precautions indicated.

---

---

### PROTECTIVE EQUIPMENT

**VENTILATION:** Provided local exhaust or general dilution ventilation. Ventilation equipment must be explosion-proof.

**RESPIRATOR:** The specific respirator selected must be based on the contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration. The following respirators are recommended based on the data found in the physical data, health effects and toxicity sections. They are ranked in order from minimum to maximum respiratory protection:

- \* Dust mask, including single use.
- \* Chemical cartridge respirator with an organic vapor cartridge(s) with dust filter.
- \* Gas mask with organic vapor canister (chin style or front-or-back-mounted canister) with a dust filter.
- \* Type 'C' supplied-air respirator operated in the pressure-demand or other positive pressure or continuous-flow mode.
- \* Self-contained breathing apparatus.

**FOR FIRE FIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS:** Self-contained breathing apparatus with full face piece operated in pressure demand or other positive pressure mode.

Supplied-air respirator with full face piece and operated in pressure demand or other positive pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode.

**CLOTHING:** Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

**GLOVES:** Employee must wear appropriate protective gloves to prevent contact with this substance.

**EYE PROTECTION:** Employee must wear splash-proof or dust-resistant safety goggles to prevent eye contact with this substance.

### **IMPORTANT**

*The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Rex Lumber Company makes no warranty of any kind, express or implied concerning the accuracy or completeness of the information and data herein. Rex Lumber Company will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.*