

JULY 1995

MATERIAL SAFETY DATA SHEET

WOOD DUST, HARDWOODS & SOFTWOODS

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

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

NTPA 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 & Softwood Dust
DUST - HARDWOOD & SOFTWOOD: Softwood: OSHA PEL* - 15mg/m³ 8 hour TWA -- (Total
ACGIH TLV - 5mg/m³ 8 hour TWA -- Dust
Hardwood: OSHA PEL* - 15mg/m³ 8 hour TWA -- Per Cubic
ACGIH TLV - 1mg/m³ 8 hour TWA -- Meter.)

Respirable fraction 5 mg per cubic meter.

* Both Hardwood and Softwood.

SPECIAL NOTE: Listed as particulates not otherwise regulated.

EMERGENCY TELEPHONE NO.

(800) 424-9300 CIEMTREC

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.

FIREFIGHTING 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).

FIREFIGHTING: 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 arrhythmias.

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 acute wounds that may take an extremely long time to heal.