Safety Data Sheet

Radiata Pine Industrial Lumber

1. Product and Company Identification

Product Name
Radiata Pine Industrial Lumber
Radiata Pine Shop and Moulding Grade Lumber

Product Use
Intended for industrial use for the production of moulding and millwork products

Manufacturer
Tenon Manufacturing
100 Centennial Drive
Taupo New Zealand

Telephone Number
1-866-372-9663

2. Composition/Information on Ingredients

Hazardous Ingredient	Percent	CAS #	Exposure Limits (mg/m³)	Comments
Wood	>90%	Not Assigned	OSHA PEL-TWA 15.0 OSHA PEL-TWA 5.0 ACGIH TLV-TWA 1.0	Total Dust Respirable Dust Fraction Inhalable

Note
Rough-sawn lumber may have small residual traces of anti-sapstain chemical present.

3. Hazards Identification

Inhalation
Wood dust may cause irritation to nose, throat and lungs resulting in breathing difficulty.

Eye Contact
Wood dust may irritate the eyes.

Skin Contact
Wood dust and contact with the skin may evoke allergic reactions in sensitised individuals. If an allergy pre-exists or develops, it may be necessary to remove the sensitised worker from further exposure to wood dust or wood-based products.

Ingestion
Unlikely to occur; however if swallowed abdominal discomfort and vomiting may occur.

Chronic Effects
Repeated exposures over many years to uncontrolled dust from these timbers may increase the risk of allergic dermatitis, asthma, or chronic nose or throat irritation in some people. The risk of nasal or paranasal sinus cancers may also be increased.

If workplace practices noted in this MSDS are followed, no chronic health effects are anticipated.

4. First Aid Measures

Inhalation
Remove victim to fresh air. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped, apply artificial respiration at once. In event of cardiac arrest, apply cardio-pulmonary resuscitation (CPR) if trained. Seek medical advice.

Eye Contact
Irrigate with flowing water for 15 minutes. Seek medical assistance if effects persist.

Skin Contact
Wash contaminated skin with plenty of soap and water.

Ingestion
If conscious, give plenty of water to drink. Do NOT induce vomiting. Seek medical assistance. If vomiting occurs, place victim face downward, with the head turned to the side and lower than the hips to prevent vomit entering the lungs.

First Aid Facilities
Safety shower, eyewash, CPR training, oxygen mask.

Advice to Doctor
Treat symptomatically

5. Fire Fighting Measures

Flash Point
NA

Flammable Limits
LFL = NA
UFL = NA

Extinguishing Media
Water, carbon dioxide, sand.

Autoignition Temperature
Variable, typically 400-500°F (200-260°C).

Special Firefighting Procedures
None.

Unusual Fire and Explosion Hazards
Depending on moisture content, and especially particle size, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the LEL for wood dusts.

6. Accidental Release Measures

Spill or Leak Procedures
Not Applicable

Waste Disposal
See Section 13

7. Handling and Storage

Precautions to be taken in Handling and Storage
Avoid repeated or prolonged breathing of wood dust. Avoid eye contact and repeated or prolonged contact with the skin. Change protective clothing and gloves when signs of contamination occur. When storing product, the material should be kept off the ground. Store in a cool, dry place and away from heat, flames, sparks and other sources of ignition.

8. Exposure Controls/Personal Protection

Engineering Controls
Use in an area with sufficient natural or mechanical ventilation to avoid airborne exposure hazards. Local exhaust (extract) ventilation is the preferred method.

Personal Protective Equipment

Respiratory Protection
A NIOSH/MSHA approved dust respiratory is recommended when allowable exposures may be exceeded, especially when sawing or cutting.

Protective Gloves
Cloth, canvas, or leather gloves are recommended to minimise potential slivers or mechanical irritation from handling product.

Eye Protection
Goggles or safety glasses are recommended when machining this product and in areas with high dust levels.

Other Protective Clothing or Equipment
Protective clothing should be worn where prolonged skin contact may occur. Protective clothing should be laundered separately from household clothing and before reuse.

Personal Hygiene
Wash hands thoroughly with soap and water before eating, drinking, using the bathroom, or using tobacco products and avoid direct hand to mouth contact with soiled hands.

9. Physical and Chemical Properties

Appearance
Products appear as rough sawn or surfaced lumber.

Boiling Point
N/A

Flash Point
N/A

Vapour Pressure
N/A

Flammability Limits
N/A on dried timber

Specific Gravity
0.4 to 0.6 g/ml

Solubility in Water
Not soluble

Other Properties - pH
Not applicable

10. Stability and Reactivity

Stability
Stable.

Conditions to Avoid
Avoid open flame. Product may ignite at temperatures exceeding 400°F (200°C).

Incompatibility
Avoid contact with oxidising agents.

Hazardous Decomposition or By-Products
Thermal decomposition can produce irritating and potentially toxic products including carbon monoxide, carbon dioxide, aliphatic aldehydes, resin acids, terpenes, and polycyclic aromatic hydrocarbons.

Hazardous Polymerization
Will not occur.

Sensitivity to Mechanical Impact
NA

Sensitivity to Static Discharge
NA

11. Toxicological Information

Wood Dust (softwood)
OSHA Hazard rating = 3.3; moderately toxic with probable oral lethal dose to humans being 0.5-5g/kg. IARC has classified untreated wood dust as a Group 1 human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust.

12. Ecological Information

No data available.

13. Disposal Considerations

Disposal Guidance
In its purchased form, dispose of wood and wood products by ordinary trash collection. Sawdust and other manufacturing waste can be incinerated or landfilled in accordance with local, state and federal regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets the RCRA criteria for hazardous waste. This product is typically not considered a hazardous waste but State run waste programmes may be more stringent. Check with your local or state regulators prior to disposal.

14. Transport Information

DOT Hazardous Material Classification
This material is not regulated as a hazardous material by the DOT.

15. Regulatory Information

OSHA (29 CFR 1910.1200)
This product is regulated under the Hazard Communication Standard.

RCRA (40 CFR 261)
Dispose of in accordance with local, state and federal regulations. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets the RCRA criteria for hazardous waste. This product is typically not considered a hazardous waste but State run waste programmes may be more stringent. Check with your local or state regulators prior to disposal.

16. Other Information

Date Prepared
July 18th, 2005

Prepared by
Tenon Limited, Technical Development Manager

User's responsibility
The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for the proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure this sheet is the most up-to-date issue.

Definition of Common Terms

ACGIH	American Conference of Governmental Industrial Hygienists
C	Ceiling Limit
CAS#	Chemical Abstracts System Number
DOT	U. S. Department of Transportation
DSL	Domestic Substance List
EC50	Effective concentration that inhibits the endpoint to 50% of control population
EPA	U.S. Environmental Protection Agency
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Concentration in air resulting in death to 50% of experimental animals
LCLo	Lowest concentration in air resulting in death
LD50	Administered dose resulting in death to 50% of experimental animals
LDLo	Lowest dose resulting in death
LEL	Lower Explosive Limit
LFL	Lower Flammable Limit
MSHA	Mining Safety and Health Administration
NA	Not Applicable
NAV	Not Available
NIOSH	National Institute for Occupational Safety and Health
NOEL	No-observable Effect Level
NPRI	Canadian National Pollution Release Inventory
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
STEL	Short-Term Exposure Limit (15 minutes)
STP	Standard Temperature and Pressure
TCLo	Lowest concentration in air resulting in a toxic effect
TDG	Canadian Transportation of Dangerous Goods
TDLo	Lowest dose resulting in a toxic effect
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time-Weighted Average (8 hours)
UFL	Upper Flammable Limit
WHMIS	Workplace Hazardous Materials Information System