RADIATA PINE

1. Product and Company Identification

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

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

Manufacturer
Claymark Limited
10 – 24 Vaughan Road
Rotorua
New Zealand
PO Box 1796
Rotorua 3040

Telephone Number  +64 7 350 1085
Fax Number  +64 7 345 5981
Web site  www.claymark.com

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Hazardous Ingredient</th>
<th>Percent</th>
<th>CAS#</th>
<th>Exposure Limits (mg/m³)</th>
<th>Comments</th>
</tr>
</thead>
</table>
| 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 the timber 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.
RADIATA PINE

4. First Aid Measures

Inhalation
Remove victim to fresh air. If breathing laboured and patient is 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. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical assistance.

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

Advice to Doctor
Treat symptomatically.

5. Fire Fighting Measures

Flash Point
Not applicable

Flammable Limits
LFL = Not applicable
UFL = Not applicable

Extinguishing Media
Water, carbon dioxide, sand.

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

Special Fire-Fighting Procedures
None.

Unusual Fire and Explosion Hazards
Wood is a combustible material. Depending on the moisture content, and especially particle size, wood dust may explode in the presence of an ignition source. An airborne dust concentration of 40gm/m³ 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
Avoid repeated or prolonged breathing of wood or primer dust. Avoid eye contact and repeated or prolonged contact with the skin. Change protective clothing and gloves when signs of contamination occur.
Store product up off the ground and protected from the weather. 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 respirator or equivalent is recommended when allowable exposures may be exceeded especially when sawing or cutting.

**Protective Gloves**
Cloth, canvas, or leather gloves are recommended to minimise risk of potential splinters or from mechanical irritation when handling the product.

**Eye Protection**
Safety glasses or goggles are recommended when machining this product and goggles 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. Avoid direct hand to mouth contact with hands prior to washing.

9. Physical and Chemical Properties

**Appearance**
Product appears as sawn or surfaced lumber

**Boiling Point**
Not applicable

**Flashpoint**
Not applicable

**Vapour Pressure**
Not applicable

**Flammability Limits**
Not applicable on dried lumber.

**Specific Gravity**
0.4 – 0.6 g/ml

**Solubility in Water**
Not soluble

**pH**
Not applicable

10. Stability and Reactivity

**Stability**
Stable

**Conditions to Avoid**
Avoid exposure to fire. Product may ignite at temperatures exceeding 400°F (200°C).

**Incompatibility**
Avoid contact with oxidizing agents
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 Guide
In its purchased form, dispose of wood and wood products by ordinary trash collection. Sawdust and other manufacturing waste can be incinerated or land-filled in accordance with local, state and federal regulations.

14. Transport Information

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

15. Regulatory Information

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.

Other Information
Material Safety Data Sheet Issue date: 18 August 2011
Reason for issue: New product
Replaces: Not applicable

User 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.
**RADIATA PINE**

**Definition of Common Terms**

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

END OF MATERIAL SAFETY DATA SHEET