MATERIAL SAFETY DATA SHEET
(Marine Plywood)

P.T. Kayu Lapis Indonesia

Important Notice: This Material Safety Data Sheet (MSDS) is written by P.T. KAYU LAPIS INDONESIA. As such, the information contained herein must not be altered, deleted or added to. P.T. KAYU LAPIS INDONESIA will issue a new MSDS when there is a change in product specifications and/or guidelines or regulations. P.T. KAYU LAPIS INDONESIA will not accept responsibility for any changes made to its MSDS in content by any other persons.

IDENTIFICATION:

Product Names: BS 1088 AA External Marine plywood truck siding panels

Specification/classification:
<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standar</td>
<td>Plywood suitable for use when exposed to regular wetting or permanent exposure to water (fresh or salt).</td>
</tr>
</tbody>
</table>

Use: Ship, boat and or truck building

PHYSICAL DESCRIPTION / PROPERTIES

Appearance: The products are manufactured as pressed boards in thickness 15 and 17mm with Tongue and groove or not Tongue and groove. They are constructed from Tropical Forest Hardwoods, which are bonded together with resin.

Density: 0.50 – 0.85

INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/Chemical Entity</th>
<th>CAS no</th>
<th>Proportion by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Veneer</td>
<td>None</td>
<td>&gt; 90 – 95%</td>
</tr>
<tr>
<td>Phenol formaldehyde resin</td>
<td>9003-35-4</td>
<td>&lt; 8%</td>
</tr>
</tbody>
</table>

Note: The wood veneer and the resins are bonded together under heat and pressure. The process cures the resin, however small amounts of formaldehyde may be released from the finished product.
HEALTH HAZARD INFORMATION

Health Effects: Plywood is not classified as hazardous, however handling panel edges and surfaces may cause splinters.

Known healthy effects are
Cured Resin: The cured resin is inert and not likely to contribute to health effects.
Wood dust: When the boards are machined (sawn, sanded, drilled, planed etc) wood dust is produced. Wood dust and splinters may cause irritation to the nose, throat, eyes and skin. The wood dusts may also be a sensitizer and some people may develop allergic dermatitis or asthma. Inhalation of wood dust may increase the risk of nasal and Para nasal sinus cancers. Exposure to the wood dust produced through machining may result in the following health effects;

Acute Ingestion: Unlikely to occur, however swallowing wood dust may result in abdominal discomfort.
Eyes: The wood dust may be irritating to the eyes causing discomfort and redness.
Skin: The wood dust may be irritating to the skin, resulting in itching and on occasions, a red rash. Allergic contact dermatitis may occur.
Inhaled: The wood dust may irritate the throat and lungs especially in people with upper respiratory tract or chest complaints. Asthma may occur.

Chronic: Repeated exposures to uncontrolled wood dust from these boards over many years may increase the risk of allergies, dermatitis, asthma or chronic nose or throat irritation in some people, the risk of nasal or Para nasal sinus cancers may also be increased. If the workplace practices noted in this MSDS are followed, no chronic health effects are anticipated.

First Aid:
Swallowed: Rinse mouth with water and give water to drink. If abdominal discomfort occurs, seek medical advice.
Eye: Flush with flowing water for at least 15 minutes and if symptoms persist, seek immediate medical attention. Contact lenses to be removed.
Skin: Wash with mild soap and running water.
Inhaled: Move from dust affected area to fresh air.
Advice to Doctor: Treat symptomatically.

PRECAUTIONS FOR USE

Wood preservatives contain biocidal active ingredients for the protection of wood and wood based materials against wood-destroying organism.

Wood dust is also listed as a sensitizer and the Exposure standard is under review. In the interests of maintaining a safe working environment, it is recommended that workplace
exposures to wood dust should not exceed 1.0mg/m³ time weighted average (TWA)

**Engineering Controls**

: All work with these boards should be carried out in such a way as to minimize the generation of wood dust. Under factory conditions, machining should be done with equipment fitted with exhaust devices capable of removing wood dust at the source. Hand power tools should be fitted with dust bags. Work areas should be well ventilated. They should be cleaned at least daily, and wood dust should be removed by vacuum cleaning or by wet sweeping.

**Skin Protection**

: Wear loose, comfortable clothing. Long sleeved shirts, trousers and comfortable work gloves should be worn if skin irritation occurs and to minimize risk of splinters.

After handing boards, wash with a mild soap and water before eating. Do not scratch or rub the skin if it becomes irritated.

Wash work clothes regularly and if possible separate from other clothes.

**Respiratory Protection**

: If wood dust exposures are not controlled when machining (sawing, routing, planning, drilling, sanding, etc). a class P1 (Filter at least 80% of airborne particles) or P2 (Filter at least 94% of airborne particles) replaceable filter or disposable face piece respirator should be worn.

**Eye Protection**

: Safety glasses or non-fogging goggles should be worn when machining.

**Flammability**

: These boards are flammable but difficult to ignite. Avoid a buildup of wood dust and keep all storage and work areas well ventilated. Avoid sources of radiant heat and flame and avoid sparks and sources of ignition in all electrical equipment, including dust extraction equipment. People must not smoke in storage or work areas.

**SAFE HANDLING INFORMATION**

**Storage and transport**

: Boards should be stored in well ventilated areas away from sources of heat, flames or sparks. No special transport requirements are considered necessary

**Spills and Disposals**

: Off-cuts and general waste material should be placed in containers and disposed of at approved landfill sites, or burnt in an approved furnace or incinerator, in accordance with disposal authority guidelines. Wood dust should be cleaned up by vacuuming or wet sweeping.

**Fire / Explosion Hazard**

: Early fire hazard properties,

Burning or smoldering boards or wood dust can generate carbon dioxide and other pyrolysis products typical of burning organic material. Dry wood dust in high concentrations can be explosive. Use water or dry chemical fire extinguishers.

**Smoking**

: Storage and work areas should be smoke free
CONTACT POINT
P.T. KAYU LAPIS
Wisma Idola Tunggal, Slipi
Jl. Letjen S. Parman kav.67
Jakarta 11410, Indonesia
Phone : +62 21 530 6448
Fax : +62 21 530 1575

“The information contained in this document is based on data available at the time of writing, which we believe is accurate and reliable. From time to time, information will be changed and added to as new data becomes available. No responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purpose and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of the information.”