

# Material Safety Data Sheet

## Maica High Pressure Decorative Laminate

### SECTION 1:

#### Product and Company Identification

#### MANUFACTURER:

Maica Laminates Sdn Bhd  
5100, Lorong Mak Mandin 5  
Mak Mandin Industrial Estate  
13400 Butterworth, Penang, Malaysia.

#### MANUFACTURER'S EMERGENCY CONTACT:

Marketing Department  
Maica Laminates Sdn Bhd  
Tel: +604-332 7436 / 7437  
Fax: +604-332 6570

#### PRODUCT NAME:

maiLaminate and maiCompact (All grade and thickness)

#### SYNONYMS:

High Pressure Decorative Laminate (All grades and thicknesses)

#### MATERIAL USES:

Decorative Laminate

#### ISSUE DATE:

27 JANUARY 2011

### SECTION 2:

#### Hazard Identification

#### ENVIRONMENTAL AND HEALTH ASPECT, IN USE

maiLaminate and maiCompact are fully cured and therefore chemically inert. VOC Gas released from surfaces and edges is extremely low. maiLaminate and maiCompact formaldehyde emission level is far below the limit for wood-based materials (emission << Formaldehyde Class E1).

Furthermore, the low chemical emissions were tested by Air Quality Sciences, Inc., according to the GREENGUARD Method and Laboratory Quality Requirements and ASTM D5116 standard. maiLaminate and maiCompact were awarded two GREENGUARD marks from GREENGUARD Environmental Institute: GREENGUARD Indoor Air Quality Certified® mark and the GREENGUARD Children & Schools<sup>SM</sup> Certified for complying the requirements.

The decorative surfaces are resistant to all common household solvents and chemicals and have therefore been used for many years in applications where cleanliness and hygiene are important.

The nonporous maiLaminate and maiCompact surfaces and edges are easy to disinfect with hot water, steam and all common types of disinfectants used in hospitals and professional applications.

No halogen, biocides, pesticides, heavy metals (e.g. lead, cadmium, chromiumVI, mercury), or plasticizers are being used in production. Level of heavy metals is therefore present at level below the Green Label requirement.



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### SECTION 3: Composition / Information on Ingredients

Substances	CAS No.	Proportions (%w/w)	
		HPL	Compact
Fiber	N/A	47.0 – 68.0	55.0 – 67.0
Resin	N/A	29.0 – 46.0	30.0 – 40.0
Other	N/A	3.0 – 9.0	2.0 – 6.0

### SECTION 4: First Aid Measures

#### SWALLOWED:

Give water to drink. If abnormal discomfort occurs, seek medical attention

#### EYE:

Flus with flowing water for at least 15 minutes, and if symptoms persist seek medical attention.

#### SKIN:

Wash with mild soap and running water. Seek medical attention if symptoms persist. For cuts, clean wound and apply antiseptic dressing.

#### INHALED:

Leave the dusty area.

### SECTION 5: Fire Fighting Measures

DO NOT BURN in barbecues, combustion stoves or open fires in the home as irritating gases are emitted.

Avoid breathing smoke from laser cutting machines and from burning or smouldering materials.

Full protective clothing and self-contained breathing apparatus should be worn for firefighting.

The intact product and dust must not be burnt in barbecues; combustion stoves or open fires in the home as irritating gases are emitted.

#### FIRE FIGHTING RECOMMENDATIONS:

Use water, fog, CO<sub>2</sub>, foam or dry chemical fire extinguishers.

### SECTION 6: Accidental Release Measures

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. Dust from the laminates should be cleaned up by vacuuming or wet sweeping.

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### SECTION 7: **Handling and Storage**

The laminates should be stored in well ventilated areas away from sources of heat, flame or sparks. No special transport requirements are necessary. Storage and transportation should be carried out in accordance with Maica Product Care, Handling and Storage Information.

### SECTION 8: **Exposure Controls / Personal Protection**

#### **ENGINEERING CONTROLS:**

All work with these laminates should be carried out in such a way as to minimize the generation of, and exposure to dust. Under factory conditions, sawing, drilling, sanding, heat processing etc. should be done with equipment fitted with exhaust devices capable of removing dust, gas and vapour at source. Hand power tools should be fitted with the dust bags and used in well-ventilated areas.

Work areas should be well-ventilated. These areas should be cleaned daily, and dust removed by vacuum cleaning or wet sweeping method.

#### **PERSONAL PROTECTION:**

##### ***Skin Protection***

Wear loose, comfortable clothing. After handling the laminates, wash hand with mild soap and water. Do not scratch or rub the skin if it becomes irritated. Wash work clothes regularly and separately from other clothes.

Comfortable light weight leather or protective gloves should be worn.

##### ***Eye Protection***

Dust resistant safety glasses or non-fogging goggles should be worn when machining.

##### ***Respiratory Protection***

A class P1 or P2 replaceable filter or disposable half face-piece particulates respirator should be worn when machining. Respirators should comply with AS/NZS 1716 and be selected, used and maintained in accordance with AS/NZS 1715.

##### ***Flammability***

Keep all storage and work areas well-ventilated to avoid build-up of dust that can ignite. 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. Products will only burn in a fire situation and in the presence of open flames.

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SECTION 9:  
**Physical and Chemical Properties**

<b>Appearance</b>	Maica products are a high pressure decorative compact laminate sheet consisting of layers of cellulosic fibrous impregnated with thermosetting resins and bonded together by a high pressure process.
<b>Odour</b>	Newly manufactured board and freshly cut surfaces may have an odour due to residue formaldehyde from the resin binder.
<b>Physical State</b>	Solid Sheet
<b>Density</b>	>1,35 g/cm <sup>3</sup>
<b>Solubility</b>	Insoluble in water, oil, methanol, diethyl ether, n-octanol, acetone
<b>Boiling Point</b>	Not applicable
<b>Evaporation rate</b>	Not applicable
<b>Melting Point</b>	Not applicable
<b>Flash Point, °C</b>	Not applicable
<b>Heavy Metals</b>	Does not contain toxic compounds of antimony, barium, cadmium, chromium III, chromium VI, lead, mercury, selenium.

SECTION 10:  
**Stability and Reactivity**

<b>Stability</b>	This product is stable.
<b>Conditions to avoid</b>	None
<b>Materials to avoid (incompatibility)</b>	None
<b>Hazardous Decomposition Products</b>	Carbon oxides (CO and CO <sub>2</sub> )
<b>Hazardous Polymerization</b>	Will not polymerize

SECTION 11:  
**Toxicological Information**

maLaminate and maCompact are not considered to be dangerous for humans and animals. There is no evidence of maLaminate and maCompact toxicological effects and eco-toxicity.

SECTION 12:  
**Ecological Information**

This product should be used only for its designated purposes.



Some things  
never  
change



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**SECTION 13:** Waste material shall be handled according to local regulation.  
**Disposal Consideration**

**SECTION 14:** This product is not regulated as a dangerous good. No special transport requirements are necessary.  
**Transport Information**

**SECTION 15:** No special State or Commonwealth regulation applies. The product is not listed on the Standard for the Uniform Scheduling of Drugs and Poisons.  
**Regulatory Information**

Wood dust – (certain hardwoods such as beech and oak), and Wood dust – softwood are listed in the 1999 NOHSC list of Designated Hazardous Substances: NOHSC: 10005(1999).

Formaldehyde – is listed in the 1999 NOHSC list of Designated Hazardous Substances: NOHSC 10005(1999) If presenting concentrations of 0.2% or more.

**SECTION 16:** The Forest Research Institute Malaysia (FRIM) evaluated maiCompact's resistance against termite attack compared to other wood-based materials (rubberwood, pinewood and particle board).  
**Other Information**

Two test methods were used:

1. Controlled laboratory environment (test standard ASTM D3345-08)
2. Field test (FRIM Working Procedure PK A1 test).

maiCompact proved to be the most resistant (in both laboratory and field test environment) against termite attack compared to the other tested wood-based materials, followed by pinewood, rubberwood, and particle board.

**SECTION 17:** Marketing Department  
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Certification No. : 035 - 034  
MADE FROM SUSTAINABLE FIBRES  
Certified under the Singapore GreenLabel  
maLaminate™ & maiCompact™