

High Pressure LAMINATES

STATEMENT OF HAZARDOUS NATURE: In its intact state, this product is not classified as a hazardous substance according to the criteria of Safe Work Australia. Dust from the dry product is classified as a hazardous substance according to the criteria of Safe Work Australia.

IMPORTANT NOTICE: Borg Manufacturing issues this Safety Data Sheet (SDS), in accordance with Safe Work Australia guidelines. As such the information contained herein must not be altered, deleted or added to. Borg Manufacturing will issue a new SDS when there is a change in product specifications and/or Safe Work Australia guidelines/restrictions. Borg Manufacturing will not accept any responsibility for any changes made to its SDS in content by any other person or organisation.

Product Name: **polytec** High Pressure Decorative Laminates 'HPL' (**COMPACT** laminates and **BENCH TOP** laminates)

UN Number: None Allocated

Dangerous Goods Class: None Allocated

Hazchem Code: None Allocated

Poisons Schedule Number: None Allocated

Use: Decorative surfacing of furniture, cabinets, bench tops, walls, ceilings, floors and doors.

PHYSICAL DESCRIPTION/PROPERTIES:

Appearance: **polytec** High Pressure Decorative Laminate products are manufactured in sheet form and ranging in thickness from 0.5mm to 30mm. Compact Laminate is essentially thick sheets of HPL, also known as 'Solid Phenolic'. They are made from layers of phenol formaldehyde resin impregnated papers surfaced with decorative paper impregnated with melamine formaldehyde resin which are bonded together under heat and pressure.

Odour: Newly manufactured and freshly cut surfaces may have a slight characteristic odour.

Boiling Point: (°C) Not Applicable

Melting Point: (°C) Not Applicable

Vapour Pressure: Not Applicable

Specific Gravity: (Water=1) 1.1 - 1.5

Flashpoint: Not Applicable

Flammability Limits: Not Applicable

Solubility in water: Negligible

Autoignition Temperature, °C: Does not auto ignite in its intact state

Early Fire Hazard Indices to AS 1530.3

Ignitability Index:	10 - 14
Spread of flame index:	0 - 8
Heat evolved index:	2 - 6
Smoke developed index:	2 - 4

AVERAGE SPECIFIC EXTINCTION AREA FOR 10MM AS PER ASTM E1354 : 200 M2/KG

INGREDIENTS:

Chemical Entity	CAS No	Proportion
Decorative Paper	None	<10%
Kraft Paper	None	<70%
Phenol formaldehyde (PF) resin	9003-35-4	<35%
Melamine formaldehyde (MF) resin	9003-08-1	<15%
Plasticisers		<5%
Paper pigments	None	<5%

Notes: The above ingredients are bound together under heat and pressure. The process cures the resin, and bonds all the layers of paper to form a flat sheet.

HEALTH HAZARD INFORMATION:

Formaldehyde gas may be released under some conditions. However, in well ventilated storage areas and workplaces, the concentration of formaldehyde is unlikely to exceed the World Health Organisation standard of 0.1 ppm for the general environment and it will be well below the Safe Work Australia occupational Exposure standard of 1.0ppm. Laminate dust will be given off from machining the product, and gas and vapour may be produced from heat processing. The known health effects from laminate dust and formaldehyde are as follows:

Laminate Dust:

The laminate in their intact state do not release airborne dusts, gases or vapours. However when machining dust and splinters may cause irritation of the nose and throat, eyes and skin. Some dust may also be sensitiser, and some people may develop allergic dermatitis or asthma. Inhalation of laminate dust may increase the risk of nasal and Para nasal sinus cancer.

Formaldehyde:

Formaldehyde gas and dilute solution of formaldehyde in water are irritating to the nose and throat, eyes and skin. The solutions are also sensitisers and contact dermatitis has been reported. Formaldehyde has been evaluated by the International Agency for Research on Cancer (IARC) as group 2A, probably carcinogenic to humans. The IARC again evaluated formaldehyde in June 2004 and concluded that "There are adequate data available from humans for an increased risk of nasopharyngeal cancer" and that formaldehyde should now be classified as Group 1, carcinogenic to humans.

Safe Work Australia has listed Formaldehyde as Sensitiser and Category 2 carcinogen (probable human carcinogen) as "those substances for which there is sufficient evidence to provide strong presumption that human exposure may result in the development of cancer. This evidence is generally based on appropriate long term animal studies, limited epidemiological evidence or other relevant information"

Exposures to wood dust produced from machining the products, and gas and vapour from heat processing with inadequate ventilation may result in the following health effects:

HEALTH EFFECTS:

Acute:

- Swallowed: Unlikely to occur but swallowing dust may result in abdominal discomfort.
- Eye: The dust, gas and vapour may be irritating to the eyes causing discomfort and redness.
- Skin: The dust, gas and vapour may irritate the skin, resulting in itching and occasionally a red rash.
- Inhaled: The dust, gas and vapour may irritate the nose, throat and lungs, especially in people with upper respiratory tract or chest complaints such as asthma.

Chronic: Repeated exposure over many years controlled wood dust may increase the risk of nasal cavity cancer. Inhalation of wood dust may also increase the risk of lung fibrosis (scarring). There are also increased risks of respiratory and skin sensitisation from wood dust and formaldehyde resulting in asthma and dermatitis respectively. But if the work practices noted in this SDS are followed and exposures to airborne dust are kept to a minimum, no chronic health effects are anticipated.

FIRST AID MEASURES:

- Swallowed: Drink a glass of water. If irritation persists do not induce vomiting and seek immediate medical attention.
- Eye: Flush with flowing water for at least 15 minutes, and if symptoms persist seek medical attention.
- Skin: Wash with mild soap and running water. Remove clothing contaminated with laminate dust. Seek medical attention if symptoms persist.
- Inhaled: Leave the dusty area. If irritation persists seek immediate medical attention

Advice to Doctor: Treat Symptomatically

PRECAUTIONS FOR USE:

Exposure Standard: The Safe Work Australia Exposure Standards, published in December 2011 are:

Wood dust:

5mg/cubic metre time-weighted average (TWA) measured as inspirable particulates.

10mg/cubic metre short term exposure limit (STEL)

It is also listed as a sensitiser

Formaldehyde:

1.0 ppm (1.2mg/cubic metre) time-weighted average (TWA) 8 hours

2.0 ppm (2.5mg/cubic metre) short term exposure limit 15 minutes (STEL)

It is also listed as a sensitiser. Category 2 carcinogen (probable human carcinogen)

Ventilation Controls: All work with these laminates should be carried out in such a way as to minimise the generation of, and exposure to dust. Under factory conditions, sawing, drilling, sanding etc. should be done with equipment fitted with exhaust devices capable of removing wood dust, at source. Hand power tools should be fitted with dust bags and used in well ventilated areas. Work areas should be well ventilated. They should be cleaned at least daily and dust removed by vacuum cleaning or wet sweeping method.

PERSONAL PROTECTION:

- Skin Protection:** Wear loose, comfortable clothing. Long sleeved shirts and trousers are recommended to prevent skin irritation. After handling boards, wash with a mild soap and water. Do not scratch or rub skin if it becomes irritated. Wash work clothes regularly and separately from other clothes. Comfortable lightweight leather or equivalent work gloves (AS 2161) should be worn when cutting or fabricating edging by hand.
- Eye Protection:** Dust resistant safety glasses or non-fogging goggles (AS/NZS 1336/1337) 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:** These laminates are flammable but difficult to ignite. Fine airborne dust can ignite so avoid a build-up of 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:** The laminates should be stored in well-ventilated areas away from sources of heat, flame or sparks. No special transport requirements are considered necessary.
- Spills and disposal:** 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.
DO NOT BURN in barbeques, combustion stoves or any open fires in home as irritating gases are emitted.
Dust from the boards should be cleaned by vacuuming or wet sweeping.
- Fire & explosion hazard:** Burning or smouldering boards or dust can generate carbon dioxide and other pyrolysis products typical of burning organic material which are irritating to the respiratory tract. Dry dusts in high concentrations can be explosive. Use water, CO₂, foam or dry chemical fire extinguishers and avoid breathing smoke from burning or smouldering material.
- Smoking and other dust:** Inhalation of airborne particles from other sources in the work environment, including those from cigarette smoke, may increase the risk of contracting the lung disease associated with exposure to dust from this product. Borg manufacturing thus recommends that all work and storage areas be well ventilated, smoke free zones and other airborne contaminants be kept to a minimum.

CONTACT:

For further information on this product contact:

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