

SAFETY DATA SHEET

R-flor Radiant Barrier Particleboard Flooring

Termite Treated

Australian
PANELS

www.australianpanels.com.au

1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name Australian Panels

Address 2 Wella Way, Somersby, NSW, Australia, 2250

Telephone 1300 300 547 / 02 4340 9800

Facsimile 1300 320 547 / 02 4340 5841

Emergency 1300 300 547

Synonyms R-flor®, R-flor® H2, R-flor® YELLOWtongue, R-flor® REDtongue, R-flor® BLUEtongue, YELLOWtongue®, REDtongue®, BLUEtongue®

Use Flooring

2 HAZARD IDENTIFICATION

Not classified as hazardous according to Safe Work Australia Criteria.

Dust from the product is hazardous according to the criteria of Work Safe Australia.

UN Number None Allocated

Hazchem Code None Allocated

Packing Group None Allocated

Emergency Response Guide No. None Allocated

Transport Hazard Class None Allocated



Signal Word WARNING

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredient	EC	CAS No.	Content
Softwood(s)	N Av	N Av	>80%
Melamine/Urea/Formaldehyde Resin	607-497-9	25036-13-9	<20%
Polymeric Diphenylmethane Diisocyanate	926-920-0	9016-87-9	<2%
Paraffin Wax	232-315-6	8002-74-2	<2%
Metalised foil	N Av	N Av	<1%
Polypropylene	618-352-4	9003-07-0	<0.4%
Permethrin	258-067-9	52645-53-1	<0.05%

Notes: The above ingredients are bound together under heat and pressure. The process cures the resin, but a small amount of formaldehyde from the resin may be released from the finished product. Formaldehyde content in the finished product complies with the Australian Standard (AS/NZS 1860.1) E1 requirement when tested to AS/NZS 4266.1-17 (Desiccator test). Permethrin is included only in the R-flor®, panels and contains a concentration of less than 0.05%. As such, it does not affect the health and safety hazard associated with the manufacturing and handling of this product.

4 FIRST AID MEASURES

Ingestion Due to product form and application, ingestion is considered unlikely. Give water to drink. If abdominal discomfort occurs seek medical attention. For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

Eye If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Advice to Doctor Treat symptomatically.

5 FIRE FIGHTING MEASURES

Flammability Combustible. May evolve toxic gases (carbon/nitrogen oxides, ammonia, formaldehyde, hydrocarbons) when heated to decomposition. May evolve hydrogen cyanide gas when heated to decomposition.

Fire and Explosion Dry wood dust in high concentrations-in-air and at the elevated temperatures > 200 °C (>40g of dust per m³ of air) may spontaneously explode. Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard.

Extinguishing Dry chemical powder, carbon dioxide, foam, or water fog.

Advice for Firefighters Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Water spray may be used to cool down heat-exposed containers. Fight fire from a safe location. This product should be prevented from entering drains and watercourses.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions Wear Personal Protective Equipment (PPE) as detailed in Section 8.

Spills and Disposal 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 hazardous and irritating gases are emitted. Dust from machining the product should be cleaned up by vacuuming or wet sweeping.

Environmental Precautions Prevent product from entering drains and waterways.

Methods of Cleaning Up If spilt, collect and reuse where possible.

References See Sections 8 and 13 for exposure controls and disposal.

7 STORAGE AND HANDLING

Storage These products should be stored inside in well-ventilated areas away from sources of heat, flame, or sparks. No special transport requirements are considered necessary.

Handling Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking, and smoking in contaminated area.

8 EXPOSURE CONTROLS / PERSONAL PROTECTIONS

Exposure Standards

Ingredient	TWA		STEL		Notices
	ppm	mg/m ³	ppm	mg/m ³	
Formaldehyde	1.0	1.2	2	2.5	-
Paraffin Wax	N Av	2	N Av	N Av	-
Polymeric Diphenylmethane di-isocyanate	N Av	0.02	N Av	0.07	-
Wood dust (softwoods)	N Av	5	N Av	10	-

As published by Safe Work Australia.

TWA The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as a fine dividing line between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standards. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator.

Personal Protection Equipment SAFETY SHOES, OVERALLS, GLOVES, SAFETY GLASSES.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted. Wear overalls, gloves, safety glasses. Always wash hands before smoking, eating, drinking, or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene Measures Keep away from food, drink, and animal feeding stuffs. When using do not eat, drink, or smoke. Wash hands prior to eating, drinking, or smoking. Avoid contact with clothing.

Avoid eye contact and skin contact. Avoid inhalation of vapours, mist, or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

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.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance Manufactured pressed board ranging in thickness. They are made from plantation wood fibres or flakes, which are bonded together with resin (glue) under heat and pressure. Long edges are grooved with a coloured plastic tongue, Yellow, Red & Blue, inserted in one groove. R-flor® boards contain a termiticide additives and has Blue coloured edge wax to identify floor type. R-flor® has been laminated with a metalised foil layer underside of the board.

Colour Various as manufactured for identification of grades

Odour Newly manufactured and freshly cut surfaces may have a paint pine and resin odour.

Solubility Negligible

Specific Gravity (20°C) 0.65-0.85

Relative Vapour Density (air=1) >1

Vapour Pressure (20°C) N App

Flash Point (°C) N App

Flammability Limits (%) N App

Autoignition Temperature (°C) Does not ignite in its intact state

Melting Point/Range (°C) N App

Boiling Point/Range (°C) N App

pH N App

Viscosity N App

Classified as Group 3 in accordance with Building Code of Australia.

N Av = Not Available, **N App** = Not Applicable

10 STABILITY AND REACTIVITY

Chemical Stability This material is thermally stable when stored and used as directed.

Conditions to Avoid Elevated temperatures and sources of ignition.

Incompatible Materials Oxidising agents.

Hazardous Decomposition Products Oxides of carbon and nitrogen, smoke, and other toxic fumes.

Hazardous Reactions No known hazardous reactions.

11 TOXICOLOGICAL INFORMATION

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 1.0 ppm.

Wood dust will be given off from machining the product, and gas and vapour may be produced from heat processing.

The known health effects from wood dust and formaldehyde are as follows:

Wood Dust Dust and splinters may cause irritation of the nose and throat, eyes, and skin. Some woods may also be sensitizers, and some people may develop allergic dermatitis or asthma. Inhalation of wood dust may increase the risk of nasal and paranasal sinus cancer.

Wood dust has been evaluated by the International Agency for Research on Cancer (IARC) as group 1, carcinogenic to humans.

Formaldehyde Formaldehyde gas and dilute solution of formaldehyde in water are irritating to the nose and throat, eyes, and skin. The solutions are also sensitizers 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 Sensitizer and Category 2 carcinogen (probable human carcinogen) as "those substances for which there is sufficient evidence to provide a 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:

ACUTE EFFECTS

Inhalation Material is an irritant to mucous membranes and respiratory tract. Inhalation of vapours can result in headaches, dizziness, and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.

Skin Contact Dust, gas, and vapour may irritate the skin, resulting in itching and occasionally a red rash.

Ingestion Unlikely to occur, but can result in nausea, vomiting and irritation of the gastrointestinal tract. May cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.

Eye Contact Dust, gas and vapour may be irritating to the eyes causing discomfort and redness.

Chronic Repeated exposure over many years to uncontrolled 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 exposure to airborne dust are kept to a minimum, no chronic health effects are anticipated.

12 ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute Aquatic Hazard This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100mg/L.

Long-term Aquatic Hazard This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available. OR in the absence of chronic toxicity data, acute toxicity estimate (based on ingredients): >100mg/L, where the substance is not rapidly degradable and/or BCF <500 and/or log Kow <4.

Ecotoxicity Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product entering the environment.

13 DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national, and international Regulations.

14 TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE.

No special transport requirements are considered necessary.

UN No. None Allocated

DG Class None Allocated

Packing Group None Allocated

EPG No. None Allocated

UN Proper Shipping Name None Allocated

Subsidiary Risk(s) No. None Allocated

Hazchem Code None Allocated

15 REGULATORY INFORMATION

According to the criteria of the National Occupational Health and Safety Commission: NOHSC:1008 (1999) and NOHSC:10005(1999) and the assessment is that occupational exposure to dust, smoke of fume from this product is hazardous.

This product is not listed in the Standard for the Uniform Scheduling of Drug and Poisons. No special State or Commonwealth regulations apply.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16 OTHER INFORMATION

Additional Information The dust generated from this product is hazardous according to the criteria of ASCC (formerly NOHSC).

Fire Properties of Fire Rating Classified as Group 3 as per section 9(n) of AS 5637 in accordance with specification C1.10 section 4 of BCA.

Thermal Resistance R-Values

Thickness (mm)	Product - R-flor®	Thermal Resistance R-Values m ² K/W
19	YELLOWtongue®	0.16
22	REDtongue®	0.18
25	BLUETongue®	0.21

Combustible - Explosive Carbonaceous Dust Carbonaceous/organic dusts have the potential, with dispersion, to present an explosion hazard if an ignition source exists. All equipment used to handle, transfer, or store this product **MUST BE** cleaned thoroughly prior to cutting, welding, drilling or exposure to any other form of heat or ignition sources. If bulk stored, containers should be ventilated on a routine basis to avoid vapours accumulation (where applicable, e.g., for flocculants).

Health Effects from Exposure It should be noted that the effects from exposure to this product would depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that, it is impractical to prepare a Chem Alert report, which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Personal Protective Equipment Guidelines The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

ABBREVIATIONS

BCA Building Code of Australia

CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds

EC No. European Community Number

GHS Globally Harmonized System

IARC International Agency for Research on Cancer

mg/m³ Milligrams per Cubic Meter

OEL Occupational Exposure Limit

PEL Permissible Exposure Limit

pH Relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline)

ppm Parts Per Million

REACH Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL Short-Term Exposure Limit

TWA Time-Weighted Average

CONTACT

For further information on this product, contact:

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Fax 1300 320 547

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