



## MATERIAL SAFETY DATA SHEET - Ricycled™

### Product Description

Ricycled™ is a solid wood composite material that is made by combing rice husks (55%) and recycled or waste PVC material (45%) in the presence of heat and pressure. The finished product is formed by extrusion. There are no toxic chemicals or additives used in the production process. It is therefore, a non hazardous material.

It is however, advisable to minimise the generation of dust and to ensure adequate ventilation when working in an enclosed space. An approved safety dust mask should be used.

Ricycled™ looks feels and handles like wood. Documentation and precautions in handling the material are similar for any other wood product.

Manufacturer	Ricycled Asia Pacific Sdn Bhd No1 Jalan Tiaj 2/3, Taman Industri Alam Jaya, 42300 Bandar Punchak Alam, Selangor Malaysia  E-mail: <a href="mailto:info@ricycled.com">info@ricycled.com</a>
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## PRODUCT IDENTIFICATION

Product Name:	Ricycled™
UN Number:	N/A
Dangerous Goods Class:	N/A
Hazchem Code:	N/A
Poisons Schedule:	N/A
Uses:	Material is supplied as a solid material similar to wood and can be used as a substitute to softwood and hardwood.
Physical Description:	Light Brown and resembling wood but can be coated. The product is odourless.

## RICYCLED 12mm TEST RESULTS

Property	Testing Protocol	Unit	Test Value
Bending Strength: Modulus of rupture	BS EN310:1993	MPa	52.2
Bending Strength: Modulus of elasticity	BS EN310:1993	MPa	52.10
Internal Bond	BS EN319:1993	MPa	6.64
Thickness Swelling	BS EN317:1993	%	0.13
Water Absorption	BS EN317:1993	%	0.58
Tensile Strength	ASTM D638m 1991a	MPa	31.7
Moisture Content	BS EN322:1993	%	0.44
Density	BS EN323:1993	Kg/m <sup>3</sup>	1513
Cyclic Test: Thickness Swelling	BS EN321:1993	%	-0.1
Cyclic Test: Internal Bond	BS EN321:1993	MPa	5.7
Acid Resistance	Japanese Industrial Standards		No discolouration
Alkali Resistance	Japanese Industrial Standards		No discolouration
Toluene Resistance	BS EN382-1:1993		275mm (length of stain)

Results issued by, after testing at:  
Wood Composite Testing Laboratory, Forest Products Division, Forest Research Institute Malaysia.

### RICYCLED 15mm TEST RESULTS

Property	Testing Protocol	Unit	Test Value
Screw Withdrawal (facewise)	BS EN320:1993	N	2772
Screw Withdrawal (edgewise)	BS EN320:1993	N	2706

Results issued by, after testing at:  
Wood Composite Testing Laboratory, Forest Products Division, Forest Research Institute Malaysia.

### RICYCLED 8mm TEST RESULTS

Property	Testing Protocol	Unit	Test Value
Izod Impact Test	ASTM 256	J/m <sup>2</sup>	1515

Result issued by, after testing at:  
Malaysian Timber Industry Board, Fibre and Biocomposite Development Centre (FIDEC)

<u>Ingredients:</u>	<u>CAS Number</u>	<u>Concentration</u>
Rice Hulls / Husks	71630-92-7	55 - 75%
Poly Vinyl Chloride	9002-86-2	25 - 45%

## HEALTH HAZARD INFORMATION

### **Health Effects**

Recycled™ is sold as an extruded solid product and does not present a health hazard in this state. The product can be worked as wood and therefore, standard safety precautions should be followed when grinding, routing, drilling and/or sawing the material.

**Eyes:** In the event dust is caught in the eyes it may cause irritation, watering and/or redness.

**Inhaled:** Fine dust made by power tool working Recycled™ by any of the above methods may cause sneezing, coughing and nose irritation if inhaled.

**Swallowed:** In the unlikely event dust from working Recycled™ may cause mild stomach discomfort.

**Skin:** Dust made from power tool working is not known to irritate the skin.

### **Personal Protection**

**Eyes:** When cutting Recycled™, approved safety glasses should be worn.

**Inhalation:** To avoid inhaling dust wear an approved face mask.

**Skin:** To avoid direct skin contact wear long sleeved garments and trousers. Avoid rubbing fine dust into skin and wash work clothes regularly.

### **Flammability**

Recycled™ exhibits significant fire retardant capability. PVC has inherently superior fire retarding properties due to its chlorine content, even in the absence of fire retardants. For example, the ignition temperature of PVC is as high as 455°C, and is a material with less risk for fire incidents since it is not ignited easily. In the event of ignition extinguish with water, carbon dioxide, foam or dry chemical extinguishers as appropriate for the working environment.

### **Storage and Transport**

Recycled™ boards should be transported and stored in a supported flat position. Uncoated boards can be stored outdoors for extended periods and do not require to be protected from effects of precipitation, temperature or UV.

### **Disposal of Dust and Off-cuts**

Following power tool working, dispose of dust by sweeping area and disposing of off-cuts to the appropriate rubbish bin. Off-cuts will not burn. To avoid excessive dust sprinkle water prior to sweeping.