

EVERTUFF™

MATERIAL SAFETY DATA SHEET 1

Current as of 1st January 2010

Section 1 – Product Identification

Product Description	Extruded Wood Plastic Composite Profiles
Supplier	Cosset Industries Australia Pty Ltd
Address	Unit 2/4 Charles Street, Woodside SA 5244
Phone	(08) 8389 9331
Facsimile	(08) 8389 7332
Email	service@cosset.com.au
Website	www.cosset.com.au

Section 2 – Hazardous Ingredients

There are no hazardous ingredients under normal processing conditions. However, components are:

CAS#	Component
N/A	Wood Flour
9002-88-4	High Density
N/A	Minors

Potential health effects are indicated in Section 6.



Section 3 – Physical & Chemical Properties

Appearance	Solid charcoal profiles
Boiling Point	N/A
Melting Point	140°C
Freezing Point	N/A
Odour	Little or no odour
Evaporation Point	N/A
Vapour Pressure	N/A
Vapour Density	N/A
Density	1045kg/m ³
% Volatile by Volume	N/A
Solubility (H ₂ O)	0%
Reactivity (H ₂ O)	0%

Section 4 – Reactivity Data

Stability	Stable
Incompatibility (materials to avoid)	Strong alkaline solutions
Hazardous Combustion By Products	C, CO, CO ₂

Section 5 – Fire & Explosion Hazard Data

Flash Point	Not determined
Critical Heat Flux	Less than or equal to 1.1kW/m ²
Upper/Lower Flammability Limit	Not determined
Auto Ignition	Not determined
Temperature	Not determined
Classification	Combustible

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MATERIAL SAFETY DATA SHEET 2

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Section 6 – Health Hazards and First Aid

	Signs & Symptoms of Acute Overexposure	First Aid Measure
Eyes	Direct contact with eyes may cause irritation. Symptoms can include irritation, redness, scratching of the cornea and tearing.	Immediately flush with water for 15 minutes. Seek medical attention if symptoms persist.
Skin	Skin exposure may cause irritation. Rubbing may increase irritation. Some wood species and their dust contain natural toxins which can have adverse effects on humans.	If skin irritation occurs flush immediately with soap and water. If irritation persists seek medical attention.
Ingestion	Ingestion of wood dusts is unlikely. No effects of ingestion have been identified. If ingestion does occur, slight gastro intestinal irritation may result. Certain wood species and their dust contain natural toxins which can have adverse effects on humans.	If the material is ingested, get medical attention or advice. Call the Poisons Information Centre: Aust 131 126 or NZ 0800 764 766.
Inhalation	Wood dust is irritating to the nose, throat and lungs. Symptoms may include nasal dryness, deposits or obstructions in the nasal passages, coughing, sneezing, dryness and soreness of the throat and sinuses, hoarseness and wheezing. Some species of wood may cause allergic respiratory reactions with asthma like symptoms in sensitised individuals.	If dusts are inhaled, remove person to fresh air. If not breathing, give artificial respiration. If symptoms persist seek medical advice.

Note to Physician

Respiratory ailments and pre-existing skin conditions may be aggravated by exposure to dust from machining this product.

Medical Conditions Generally Aggravated by Exposure to Wood Dust: Pre-existing eye, respiratory system and skin conditions.

Chronic Overexposure: Wood dusts may be irritating to the eyes, skin and respiratory tract. Prolonged or repeated inhalation of wood dust may cause respiratory irritation, recurrent bronchitis and prolonged colds. Depending on the species of wood, recurrent exposure may cause allergic skin and respiratory reaction in some individuals. No LD50 data available for the product.

Carcinogenic: Workers in timber industries with a history of exposure to wood dusts have shown increased occurrence of lung, liver, nasal and vocal cavity cancer.

Section 7 – Personal Protection/Exposure Control

Personal Protective Equipment

- **Eyes/Face:** Wear safety glasses with side shields when handling, cutting, sanding, drilling or machining the product. Use a face shield for processes that may generate excessive dust and swarf.
- **Skin:** Wear puncture resistant work gloves such as leather when handling the product.
- **Respiratory:** Avoid inhalation. Dust mask may be worn to avoid inhalation of nuisance dust.

Exposure Control

- **Ventilation:** Machining and cutting processes should be done in a well ventilated area or using dust extraction.
- **National occupational exposure limits:** No value assigned to this material by the National Occupational Health & Safety Commission.
- **Biological Limit Values:** The ingredients in the product do not have a biological limit attached.

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MATERIAL SAFETY DATA SHEET 3

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Section 8 – Safe Handling, Storage & Disposal

Handling Procedures:

- Wood Plastic Composite is heavier than normal wood so use safe lifting procedures.
- Avoid contact with strong alkaline agents.
- Do not smoke, drink or eat while handling the product or in areas where dust is present and practice good personal hygiene procedures.
- Do not generate airborne dusts in the presence of an ignition source.
- Avoid breathing the dust.
- Wear safety glasses/mask, gloves and safety boots.

Storage Procedures:

- Store in a cool flat dry place that is out of direct sunlight and way from ignition sources.

Disposal Procedures:

- All off-cuts can be returned to Cosset Industries Australia for recycling.
- All swarf and waste should be swept up and disposed of with municipal waste.

Section 9 – Fire Fighting Measures

Specific Hazards: Combustible solid.

Hazchem Code: Not applicable.

Suitable Extinguishing Media: Water fog, foam, CO₂, dry chemical powder.

Recommendations: Upon combustion product may emit toxic fumes including carbon dioxide and carbon monoxide. Fire fighters to wear suitable breathing apparatus and protective clothing.

Section 10 – Transport Information

Road and Rail Transport: Not classified as dangerous goods.

Marine Transport: Not classified as dangerous goods.

Air Transport: Not classified as dangerous goods.

DISCLAIMER

THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE. HOWEVER COSSET INDUSTRIES AUSTRALIA CANNOT PREDICT OR ENSURE THE CONDITIONS WHICH THE PRODUCT MAY BE USED. COSSET INDUSTRIES AUSTRALIA MAKES NO WARRANTY WITH RESPECTS TO AND DISCLAIMS ALL LIABILITY FROM RELIANCE ON THIS INFORMATION.

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TEST SUMMARY DATA SHEET

Current as of 1st January 2010

All the test results are based on a 75mm x 45mm profile using a 75mm depth. Cosset's recycled wood plastic composite material has undergone rigorous testing in National Association of Testing Authorities (NATA) laboratories in the following categories:

Dry Flexural Strength Testing

Test method: ASTM D790
 Loading speed: 30mm/min Support span: 900mm
 Maximum Flexural Strength: 3.86kN or 393.6kgf

These tests showed that Cosset products have a very high capacity to flex without breaking. What's more, this capacity actually increases when wet, making them ideal for both dry and marine environments.

Wet Flexural Strength Testing

Test method: ASTM D790
 Loading speed: 30mm/min Support span: 900mm
 Maximum Flexural Strength: 3.88kN or 395.6kgf

Compressive Strength Testing

Test method: ASTM 6108
 Maximum Stress face: 27.8 MPa

How much does the product compress under strain? It takes a large amount of force to dent or damage the surface of an Cosset product!

Water Absorption Testing

Test method: ASTM D570
 Water absorption after 21 days: 5.1%

Cosset's products absorb very little water when fully submerged, and what water is absorbed actually makes them stronger!

Chemical Resistance (28 days exposure)

Test method: ASTM D543

Chemical	Absorption %	Peak Load (kN)
Control – 21°C in air	0.2	22.4
Oil – vanellus multigrade diesel engine oil SAE 15w/40	1.1	22.0
Acid – 10% HCl	7.0	21.0
Alkali – 10% NaOH	25.5	15.6
Chlorine – 5% bleach	7.3	20.7
Oxidising Agent – 5% H ₂ O ₂	6.6	21.1

Cosset products are highly resistant to most external chemical influences, and retain their flexural strength particularly well in most conditions.

Screw Pullout Testing

Test method: ASTM D6117
 Maximum Force face: 1749 MPa

How much force is required to pull a screw vertically outwards? Few natural forces can exert the amount of force required to remove a screw from a Cosset product.

Tensile Testing

Test method: AS I391-2007
 Sample dimensions 51.0mm x 44.5 mm to 51.5mm x 44.5mm
 Failure load: 25.5kN
 UTS: 11.2 MPa
 Elongation: 2.0%

To what degree will the product stretch? Essentially, Cosset products will not stretch!

Flammability Testing

Test method: AS/ISO 9239.1-2003
 Critical Radiant Flux: less than or equal to 1.1kW/m²
 Smoke Value: 652% min

The combination of recycled plastic and recycled wood flour makes the material far more resistant to fire than wood or plastic individually.

Complete tests details available by request. All figures indicated in this summary sheet are the average results from multiple test samples. Specifications or results are likely to change due to continual improvement. All tests performed in a NATA accredited laboratory.