

Material Safety Data Sheet and Technical Information Sheet

Product name
RPS MOULDINGS.

Company name
Architectural Products By Outwater.
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Characteristics

Density: 0.42-0.45 g/cm³ (*) (*) this value is variable
Composition: Recycled Polymer Polystyrene: 100% (*)
This product is free of CFC.
This product is free of asbestos.
This product is free of cyanides.
Hardness: Above 70 Shore D (*)
Thickness: This is variable: 5 mm to 27 mm.
Surface: Mouldings have a film that accepts any **high quality acrylic latex paint. Light sanding is required and make sure surface is dust free before applying paint.** We strongly suggest testing a piece prior to painting all of the mouldings.
Ozone depletion factor: 0 (CFC free, water blown).
Melting temperature: 170-190^o C
Coefficient of linear thermal expansion: 40-60 . 10-6m/ k m
Chemical properties: Does not deteriorate and resistant to most common solvents and moisture.
Physical properties: Shock and splitting resistant.
Influence of time: Dimensionally stable: will not alter by time.
Influence by humidity: Has no influence on the mechanical properties.
Influence of sound: Polyurethane is acoustically neutral.
Influence of light and sun: RPS not UV-resistant for interior use only.

Testing and Evaluation Results

CLAUSE	REQUIREMENTS	RESULT-REMARK
Flexural Properties	ASTM D 6109-05, Method A	The maximum load at rupture: 508N Flexural Strength (Modulus of Rupture): 9:10MPa (Unexposed specimens, Initial Flexural Strength) Flexural Secant Modulus at 1% Strain: 692MPa The Maximum Midspan Deflection: 12.94 mm
Freeze-Thaw Resistance	ASTM D7032-08, Section 4.7 ASTM D 6109-05 Method A	After 3 cycles Freeze-Thaw test, Flexural Strength (Modulus of Rupture): 8.79 MPa Decrease of flexural Strength: 3.4%
Fastener Withdrawal	AST D1761-06a	Specimen of 18 mm thickness, Maximum load: 118N Specimen of 30 mm thickness, Maximum load: 203N
Tensile Properties	ASTM D638-08	Tensile Strength at Break: 3.43 MPa Percent Elongation after Break: 0.64% Modulus of Elasticity: 164MPa
Coating Adhesion	ASTM D3359-08, Method A	Scale: 5A No peeling or removal

The above report testing complied with the applicable requirements of the following criteria: ASTM D7032-08, ASTM D1761-06, ASTM D6109-05, ASTM D638-08 and D3359-08

Hazards Awareness

INHALATION: Dust can cause irritation to upper respiratory tract also irritation to mucous membranes.

INGESTION: Not known – Not tested

SKIN: Dust may cause skin irritation

EYE: Dust may irritate the eyes. Always wear a mask and goggles when cutting material.

Recommended First Aid Measures

INHALATION: Move patient to a fresh and well ventilated area. Consult a physician.

INGESTION: See a physician or any emergency center.

SKIN: First, wash skin with soap and water. If irritation persists consult a physician.

EYE: Flush eyes with plenty of clean water for at least 10 minutes.

Note: People with pre-existing respiratory tract conditions might have symptoms aggravated quicker than others. Dust might cause skin and gastrointestinal symptoms.

Fire fighting measures

Vapor mixes with carbon oxides

Flame retardant: The standard material is not flame retardant

HAZARDOUS COMBUSTION PRODUCTS:

Carbon dioxide, Carbon monoxide, styrene, benzene, aldehydes, and other hazardous gases, vapors and particles.

FLAMMABLE PROPERTIES:

Flash point: Not applicable

Combustible: Material burns on contact with ignition sources.

FLAMMABLE LIMITS:

Lower flammable limit: Not applicable

Upper flammable limit: Not applicable

AUTOIGNITION TEMPERATURE: Around 800 degrees F.

EXPLOSION HAZARD: If combined with an ignition source. Dust concentration exceeds 30-60 g/m³.

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray halon or foam.

FIRE FIGHTING INSTRUCTIONS: Evacuate and inform the fire department. If fire is small, use a fire extinguisher.

Exposure to temperatures greater than 800°F may cause a fire. Smoke may contain carbon monoxide, styrene, benzene, aldehydes, and other toxic materials.

Handling and Storage:

Handling: Use only an approved NIOSH/MSHA approved protective air-purifying respirator for dusts as well as goggles when cutting material to avoid dust inhalation.

Storage: Keep away from ignition sources. Store mouldings in closed cartons to avoid bending of material.

Physical and Chemical Properties

Solubility in Water	N/A	
Boiling Point	N/A	Density: 65 lb/ft ³
Melting Point	N/A	Ph: NA
Vapor Density	N/A	Appearance: Similar to pre-finished wood mouldings

Ecological and disposal information

RPS mouldings achieve LEED certification. RPS mouldings do not pose an ecological hazard as a result of its intended use.

RPS mouldings can also be recycled. Dispose of waste according to your local, state/provincial, and federal requirements.

ASTM standard reference

RPS mouldings meet or exceed the following ASTM International Standards:

- **ASTM D6109 – 05** Standard Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastic Lumber and Related Products
- **ASTM D7032 – 08** Standard Specification for Establishing Performance Ratings for Wood Plastic Composite
- **D1761-06** Standard Test Methods for Mechanical Fasteners in Wood
- ASTM D638 – 08 Standard Test Method for Tensile Properties of Plastics
- **ASTM D3359 - 08** Standard Test Methods for Measuring Adhesion by Tape Test
- **ASTM G21 - 09** Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
- **ASTM D570 - 98(2010)e1** Standard Test Method for Water Absorption of Plastics
- **ASTM D6341 - 10** Standard Test Method for Determination of the Linear Coefficient of Thermal Expansion of Plastic Lumber and Plastic Lumber Shapes Between 30 and 140°F (34.4 and 60°C)
- **ASTM D790 - 10** Standard Test Methods for Flexural Properties of Un-reinforced and Reinforced Plastics and Electrical Insulating Materials
- **ASTM D6117 - 10** Standard Test Methods for Mechanical Fasteners In Plastic Lumber and Shapes
- **ASTM D1622 - 08** Standard Test Method for Apparent Density of Rigid Cellular Plastics
- **ASTM D3345 - 08** Standard Test Method for Laboratory Evaluation of Wood and Other Cellulose Materials for Resistance to Termites.

RPS moulding profiles

RPS mouldings (Recycled PolyStyrene) are available in the following profiles:

<ul style="list-style-type: none">• Crowns• Bases• Quarter Round• Half Rounds• Panels	<ul style="list-style-type: none">• Friezes• Chair Rails• Angle• Caps• Astragals	<ul style="list-style-type: none">• Covets• Waiscoting planks• Shoe• Door stop• Drip
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Adhesives

RPS mouldings can be applied with any PL Premium Polyurethane Construction Adhesive, Liquid Nails POLY (In-950), Liquid Nails Paneling Wood & Foam Moulding (LN-606).

Cutting

RPS mouldings can be cut just like wood. We recommend using **a blade with 60 teeth or better**. Make sure to cut quickly for a clean cut. Quick strokes will avoid melting the material.

Nailing

RPS mouldings can be nailed as well. Use a #3 or #4 Bright finish nail. If using a Nail gun set the machine between 70 and 90 PSI. Use a 16 or 18 gauge finishing brads.

Painting

RPS mouldings can be painted with any **high quality acrylic latex paint**. **Light sanding is required and make sure surface is dust free before applying paint**. We strongly suggest testing a piece prior to painting all of the mouldings.

Limited Warranty

RPS MOULDINGS are warranted to be free from defects in materials and workmanship. Any such defects must be reported to **Architectural Products** within ten (10) days of date of delivery. During this warranty period we will, at our option, replace free of charge, such merchandise as shall prove to be defective. THIS WARRANTY DOES NOT APPLY TO DAMAGE RESULTING FROM ACCIDENT, ALTERATION, MISUSE, TAMPERING, NEGLIGENCE, OR ABUSE. INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY DISCLAIMED.

Other Information

This MSDS and Technical Information Sheet are provided solely for Safety education. Architectural Products assumes no responsibility and disclaims liability for any loss, damage, or expense arising there from. The information provided was a collection of information provided to Architectural Products by reliable sources. Any tests results mentioned here were provided by an independent laboratory company.

