



## Architectural Specifications

### ProWood FR interior pressure-treated fire-retardant wood

#### PART 1 - General Product Information

- A. Lumber and plywood bearing the **ProWood FR** mark has a flame spread rating of 25 or less (Class A) when tested in accordance with ASTM E84, "Standard Test Method for Surface Burning Characteristics of Building Materials." **ProWood FR** pressure-treated fire-retardant wood shows no evidence of significant progressive combustion when the test is extended for an additional 20-minute period. In addition, the flame front does not progress more than 10 1/2 feet beyond the centerline of the burners at any time during the test. The flame spread and smoke developed index for each species and product are classified by Underwriters Laboratories Inc. (UL) and meet their premium FR-S classification.
- B. **ProWood FR** pressure-treated fire-retardant wood is manufactured under the independent third-party inspection of Underwriters Laboratories Inc. (UL) Follow-Up Service and each piece shall bear the UL classified mark indicating the extended 30-minute ASTM E84 test and UL's premium FR-S designation.
- C. **ProWood FR** pressure-treated fire-retardant wood shall be kiln dried after treatment (KDAT). The kiln drying process is monitored by Timber Products (TP), or Southern Pine Inspection Bureau (SPIB).
- D. **ProWood FR** shall be produced in accordance with International Code Council (ICC) Evaluation Service Report (ESR) ESR-4373.
- E. **ProWood FR** FRTW products comply with AWPA UC-1 and UCFA use category systems. ProWood FR treatment process meets the AWPA T1-19 standard and ProWood FR chemical has been analyzed to confirm the formulation meets AWPA P50-19 standard.
- F. **ProWood FR** UL GREENGUARD GOLD CERTIFICATION  
The ProWood FR Fire Retardant has undergone rigorous testing and met stringent standards for low volatile organic compound (VOC) emissions. Products certified to this criterion are suitable for use in schools, offices, and other sensitive environments.

#### PART 2 - Fire-Retardant Treatment

- A. Treatment shall be **ProWood FR** manufactured by UFP Industries and will be carried out at locations listed under ESR-4373 under UL-Follow Up Service.
- B. **ProWood FR** is an interior "Type A" fire-retardant with individual surface burning characteristics for the species and products listed under UL Certifications.
- C. Structural performance of **ProWood FR** pressure-treated fire-retardant wood has been tested in accordance with ASTM D5564 for lumber and ASTM D5516 for plywood. Evaluation of plywood data is in accordance with ASTM D3201. Evaluation of lumber data is in accordance with ASTM D6305. The resulting design value and span rating adjustments are published in ICC ESR-4373, which includes evaluation of high temperature (HT) strength testing for roof applications.
- D. **ProWood FR** pressure-treated fire-retardant wood is kiln dried after treatment (KDAT) to maximum moisture content of 19% for lumber and 15% for plywood.
- E. **ProWood FR** does not contain VOC's, urea formaldehyde or formaldehyde, halogens, sulfates, or chlorides.
- F. Plywood treated with **ProWood FR** shall be manufactured under US Product Standards - PS 1 or PS 2. Panels shall have a minimum bond durability of Exposure 1.
- G. Grade marked lumber treated with **ProWood FR** shall be in accordance with PS 20.

#### PART 3 - Execution

- A. **ProWood FR** pressure-treated fire-retardant wood used in structural applications shall be installed in accordance with the conditions and limitations listed in ICC ESR-4373.
- B. **ProWood FR** pressure-treated fire-retardant wood shall be installed in compliance with the requirements of the applicable building codes and product recommendations.
- C. **ProWood FR** FRTW products shall not be installed in areas where, in service, it is exposed to precipitation, direct wetting, or condensation.
- D. As with untreated wood, avoid exposure to precipitation during shipping, storage or installation. Apply a water resistive barrier or underlayment over dry sheathing as soon as practical to avoid precipitation on the panel. Panels that get wet should be allowed to dry before covering or be replaced.

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**DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES**  
**Section: 06 05 73.13—Fire-Retardant Wood Treatment**

**REPORT HOLDER:**

UFP INDUSTRIES, INC.

**EVALUATION SUBJECT:**

PROWOOD® FR FIRE-RETARDANT-TREATED WOOD

**1.0 EVALUATION SCOPE**

**Compliance with the following codes:**

- 2018, 2015, 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2018, 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)

**Properties evaluated:**

- Flame spread
- Structural
- Corrosion
- Hygroscopicity
- Fire-resistance-rated Wall Assemblies

**2.0 USES**

ProWood® FR fire-retardant-treated wood is used in areas that are not exposed to the weather or wetting, but may be exposed to dampness where the code permits the use of wood or fire-retardant-treated wood.

**3.0 DESCRIPTION**

**3.1 General:**

ProWood® FR fire-retardant-treated wood is lumber and plywood impregnated with ProWood® FR fire-retardant chemicals by a pressure process.

ProWood® FR treatment of lumber of the following species is recognized as being fire retardant:

Southern Pine	Red Pine
Douglas Fir	Ponderosa Pine
Western Hemlock	White Fir
Alpine Fir	Hem Fir
Lodgepole Pine	Balsam Fir

White Spruce	Jack Pine
Spruce-Pine-Fir	Engelmann Spruce
Red Spruce	Black Spruce

ProWood® FR treatment of plywood fabricated with face and back veneers of the following species is recognized as being fire retardant:

Douglas Fir	Southern Pine
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**3.2 Flame Spread:**

ProWood® FR fire-retardant-treated wood has a flame-spread index of 25 or less when subjected to ASTM E84 tests and shows no evidence of significant progressive combustion when the tests are continued for an additional 20-minute period.

**3.3 Structural Strength and Durability:**

The effects of ProWood® FR fire-retardant treatment on the strength of the treated lumber and plywood must be accounted for in the design of the wood members and their connections as required by this section. Load duration factors greater than 1.6 are not permitted to be used in the design.

The strength properties of lumber when treated with ProWood® FR fire-retardant chemicals and used in applications at ambient temperatures up to 150°F (66°C), are subject to the design factors shown in Tables 1 and 2 of this report.

The strength properties of plywood, when treated with ProWood® FR fire-retardant chemicals and used in applications at temperatures up to 170°F (77°C), are subject to the span limitations shown in Table 3 of this report.

**3.4 Corrosion:**

The corrosion rate of aluminum, carbon steel, galvanized steel, stainless steel, copper or red brass in contact with wood is not increased by ProWood® FR fire-retardant treatment when the product is used as recommended by the manufacturer.

**3.5 Hygroscopicity:**

ProWood® FR treated wood qualifies as an Interior Type A (HT) fire-retardant wood in accordance with the American Wood Protection Association (AWPA) Standard U1, Commodity Specification H, Use Category UCFA.

**4.0 DESIGN AND INSTALLATION**

**4.1 General:**

Structural systems that include ProWood® FR fire-retardant-treated lumber or plywood must be designed and

installed in accordance with the applicable code using the appropriate lumber design value adjustment factors and plywood spans from Tables 1, 2 and 3 of this report. Ventilation must be provided in accordance with the applicable codes.

The design value adjustment factors and plywood load and spans in Tables 1, 2 and 3 of this report are applicable under elevated temperatures resulting from cyclic climatic conditions. They are not applicable under continuous elevated temperatures resulting from manufacturing or other processes that require special consideration in design.

The treated lumber and plywood must only be used in areas (including attic spaces) where the lumber is exposed to temperatures of 150°F (66°C) or less and the plywood is exposed to temperatures of 170°F (76.5°C) or less.

Exposure to precipitation during storage or installation must be avoided. If material does become wet, it must be replaced or permitted to dry (maximum 19 percent moisture content for lumber and 15 percent moisture content for plywood) prior to covering or enclosure by wallboard or other construction materials.

**4.2 Fasteners:**

Fasteners used in ProWood® FR fire-retardant-treated wood must be galvanized steel, stainless steel, silicon bronze or copper, in accordance with Section 2304.10.5 of the 2018 and 2015 IBC, Section 2304.9.5 of the 2012, 2009 and 2006 IBC, Section 317.3 of the 2018, 2015, 2012 and 2009 IRC, and Section R319.3 of the 2006 IRC, and must be subject to the design value adjustments indicated in Table 1 of this report.

**4.3 Use as a Component of Fire-resistance-rated Wall Assemblies:** In Type III, Type IV and Type V construction, the exterior wall assemblies may be constructed of ProWood® FR treated wood studs and plywood. The design values for the studs must be adjusted in accordance with Tables 1 and 2. The allowable spans for the plywood sheathing must be in accordance with the spans given in Table 3 for ProWood® FR Wall/Subfloor.

**4.3.1 One-hour Exterior Wall Assembly:** Figure 2 presents a 1 Hour Load Bearing Wall rated from the interior side only; Figure 3 presents a 1 Hour Load Bearing Wall rated from both interior side and the exterior side. When fire resistance rating is required from both sides, the wall must be in accordance with Figure 3.

**4.3.2 Two-hour Exterior Wall Assembly:** Figure 4 presents a 2 Hour Load Bearing Wall rated from the interior side only; Figure 5 presents a 2 Hour Load Bearing Wall rated from interior side and which also carries a 1-hour rating from the exterior side. When fire resistance rating is required from both sides, the wall must be in accordance with Figure 5.

**4.4 Plywood Diaphragms and Shear Walls:**

Wood-frame diaphragms and shear walls must be constructed in accordance with Sections 2306.2 and 2306.3 of the IBC, respectively (2306.3 and 2306.4 of the 2009 and 2006 IBC).

When ProWood® fire-retardant-treated plywood is used in a diaphragm or shear wall, the panel thickness must be increased by 1/8 inch than that determined for the allowable shear values in Sections 4.2 or 4.3 of ANSI/AWC Special Design Provisions for Wind and Seismic (SDPWS) or as shown in the tables referenced in Sections 2306.2 and 2306.3 of the IBC (2306.3 or 2306.4 of the 2009 and 2006 IBC). Thickness to be used for FRT plywood compared to untreated plywood in diaphragm and shear walls are shown as follows:

ProWood® FRT Plywood Thickness (inches)	Untreated Plywood Thickness (inches)
19/32	7/16
19/32	15/32
5/8	1/2
23/32	19/32
3/4	5/8
7/8	23/32
7/8	3/4

**5.0 CONDITIONS OF USE**

The ProWood® FR fire-retardant-treated wood described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** Strength calculations must be subject to the design factors or span ratings shown in Tables 1, 2 and 3 of this report.
- 5.2** The design value adjustment factors and span ratings given in this report must only be used for unincised dimension lumber and plywood of the species noted in this report.
- 5.3** ProWood® FR treated wood must not be installed where it will be exposed to precipitation, direct wetting or regular condensation.
- 5.4** ProWood® FR treated wood must not be used in contact with the ground.
- 5.5** ProWood® FR lumber must not be ripped or milled as this will alter the surface-burning characteristics and invalidate the flame spread classification. Wall, floor and roof framing, consisting of end cuts, holes, joints such as tongue and groove, bevel, scarf, and lap, may be used.
- 5.6** Treatment is at the facilities of the listees noted in this report under a quality control program with inspections by ICC-ES and Underwriters Laboratory FR-S, Timber Products Inspection, Inc. (AA-696) or Southern Pine Inspection Bureau (AA-680).

**6.0 EVIDENCE SUBMITTED**

Data in accordance with the ICC-ES Acceptance Criteria for Fire-retardant-treated Wood (AC66), dated June 2015, (editorially revised April 2018).

**7.0 IDENTIFICATION**

**7.1** Lumber and plywood treated with ProWood® FR fire-retardant chemicals must be identified by the structural grade mark of an approved agency. In addition, all treated lumber and plywood must be stamped with the name of the inspection agency [Underwriters Laboratory FR-S, Timber Products Inspection, Inc. (AA-696) or Southern Pine Inspection Bureau (AA-680)]; Universal Forest Products, name and location; the production plant identification name and location; labeling information in accordance with Section 2303.2.4 of the 2018, 2015, 2012 and 2009 IBC and Section 2303.2.1 of the 2006 IBC or Section R802.1.5.4 of the 2018 and 2015 IRC or Section R802.1.3.4 of the 2012 and 2009 IRC or Section R802.1.3.1 of the 2006 IRC; and the evaluation report number (ESR-4373). Refer to Figure 1.

7.2 The report holder’s contact information is the following:

**UFP INDUSTRIES, INC.**  
**2801 EAST BELTLINE NE**  
**GRAND RAPIDS, MICHIGAN 49525**  
**(616) 364-6161**  
[www.ufpi.com](http://www.ufpi.com)

**NORTHEAST TREATERS OF NY**  
**796 SCHOHARIE TURNPIKE**  
**ATHENS, NEW YORK 12015**  
[rob@netreaters.com](mailto:rob@netreaters.com)

7.3 The Manufacturing Locations’ contact information is the following:

**UFP HAMILTON, LLC**  
**115 DISTRIBUTION DRIVE**  
**HAMILTON, OHIO 45015**  
**(513) 285-7190**  
[fufkesjr@ufpi.com](mailto:fufkesjr@ufpi.com)

**TABLE 1—STRENGTH DESIGN FACTORS FOR PROWOOD® FR FIRE RETARDANT TREATED LUMBER COMPARED TO UNTREATED LUMBER APPLICABLE AT SERVICE TEMPERATURES UP TO 100°F (38°C)**

STRENGTH DESIGN FACTORS	SOUTHERN PINE	DOUGLAS FIR	SPRUCE-PINE-FIR	OTHER SPECIES
Modulus of Rupture (MOR)	0.82	1.00	0.95	0.82
Modulus of Elasticity (MOE)	0.87	1.00	0.94	0.87
Work to Maximum Load (WML)	0.72	0.93	0.90	0.72
Ultimate Tensile Strength (UTS)	0.99	1.00	0.98	0.98
Maximum Compressive Strength (MCS)	0.96	0.96	1.00	0.96
Ultimate Shear Strength (USS)	0.95	1.00	0.99	0.95
Fasteners/Connectors	0.90	0.90	0.90	0.90

**TABLE 2—STRENGTH DESIGN FACTORS FOR PROWOOD® FR FIRE RETARDANT TREATED LUMBER COMPARED TO UNTREATED LUMBER APPLICABLE AT SERVICE TEMPERATURES UP TO 150°F (66°C) <sup>1,2</sup>**

STRENGTH DESIGN FACTORS	Southern Pine			Douglas Fir			Spruce-Pine-Fir			Other Species		
	Climate Zone			Climate Zone			Climate Zone			Climate Zone		
	1A	1B	2	1A	1B	2	1A	1B	2	1A	1B	2
Modulus of Rupture (MOR)	0.82	0.82	0.82	0.88	0.93	0.98	0.81	0.87	0.93	0.81	0.82	0.82
Modulus of Elasticity (MOE)	0.87	0.87	0.87	1.00	1.00	1.00	0.94	0.94	0.94	0.87	0.87	0.87
Work to Maximum Load (WML)	0.69	0.70	0.71	0.92	0.93	0.93	0.69	0.77	0.87	0.69	0.70	0.71
Ultimate Tensile Strength (UTS)	0.70	0.84	0.96	1.00	1.00	1.00	0.81	0.90	0.97	0.70	0.84	0.96
Maximum Compressive Strength (MCS)	0.66	0.81	0.93	0.84	0.89	0.94	0.83	0.91	0.98	0.66	0.81	0.93
Ultimate Shear Strength (USS)	0.66	0.80	0.93	0.88	0.93	0.98	0.82	0.91	0.97	0.66	0.80	0.93
Fasteners/Connectors	0.66	0.81	0.90	0.84	0.89	0.90	0.83	0.90	0.90	0.66	0.81	0.90

<sup>1</sup> Climate Zone definitions:

Zone 1 – Minimum design roof live load or maximum ground snow load ≤ 20 psf (960 Pa)

Zone 1A – Southwest Arizona, Southeast Nevada (Area Bounded by Las Vegas-Yuma-Phoenix-Tucson)

Zone 1B – All other qualifying areas of the United States

Zone 2 – Maximum ground snow load > 20 psf (960 Pa)

<sup>2</sup> Duration of load adjustments for snow loads, 7-day (construction) loads, and wind loads as given in the *National Design Specification® for Wood Construction®* (NDS) also apply.

**TABLE 3—MAXIMUM LOADS AND SPANS FOR PROWOOD® FR FIRE RETARDANT TREATED PLYWOOD AT SERVICE TEMPERATURES FROM > 100°F (38°C) UP TO 170°F (77°C)<sup>1,2,3,4,5</sup>**

PANEL/SHEATHING THICKNESS	Span Rating for Untreated Roof/Sub-floor Sheathing	ProWood® FR Roof Sheathing Maximum Total Load (psf)				ProWood® FR Wall or Subfloor Span (Inches)
		Span (Inches)	Climate Zone			
			1A	1B	2	
<sup>15</sup> / <sub>32</sub> , <sup>1</sup> / <sub>2</sub>	32/16	24	31	47	68	16 24 (walls only)
<sup>19</sup> / <sub>32</sub> , <sup>5</sup> / <sub>8</sub>	40/20	24 32	48 27	74 42	107 60	20 20
<sup>23</sup> / <sub>32</sub> , <sup>3</sup> / <sub>4</sub>	48/24	32 48	34 15	52 23	76 34	24 24
<sup>7</sup> / <sub>8</sub>		32 48	43 19	66 29	95 42	24 24
1		32 48	58 26	88 39	127 57	24 24
<sup>1</sup> / <sub>8</sub>		32 48	73 32	111 49	161 71	24 24

<sup>1</sup> For Surface Temperatures < 100°F, use Untreated Span Ratings

<sup>2</sup> Allowable total loads are for unsanded, Structural 1 & 2 Grade plywood, manufactured with Group 1 Species, stress grade S-2 (Fb=1650 psi), one-and-two span conditions.

<sup>3</sup> For allowable live loads, subtract dead loads (assumed to be 8 psf) from total loads listed above.

<sup>4</sup> Climate Zone definitions:

Zone 1 – Minimum design roof live load or maximum ground snow load ≤ 20 psf (960 Pa)

Zone 1A – Southwest Arizona, Southeast Nevada (Area Bounded by Las Vegas-Yuma-Phoenix-Tucson)



Zone 1B – All other qualifying areas of the United States

Zone 2 – Maximum ground snow load > 20 psf (960 Pa)

<sup>5</sup> For other load conditions, contact manufacturer.

## ProWood® FR Sample Labels

 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>UL Classified FR-S PLYWOOD</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: 30 MINUTE TEST: 25 or less</p> <p>STD-PWFR-19</p>	 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>UL Classified FR-S LUMBER</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: 30 MINUTE TEST: 25 or less</p> <p>STD-PWFR-19</p>
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 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>PLYWOOD</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: ASTM E84 30 MINUTE TEST: 25 or less</p> <p>TP Monitored (AA-696)</p> <p>STD-PWFR-19</p>	 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>LUMBER</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: ASTM E84 30 MINUTE TEST: 25 or less</p> <p>TP Monitored (AA-696)</p> <p>STD-PWFR-19</p>
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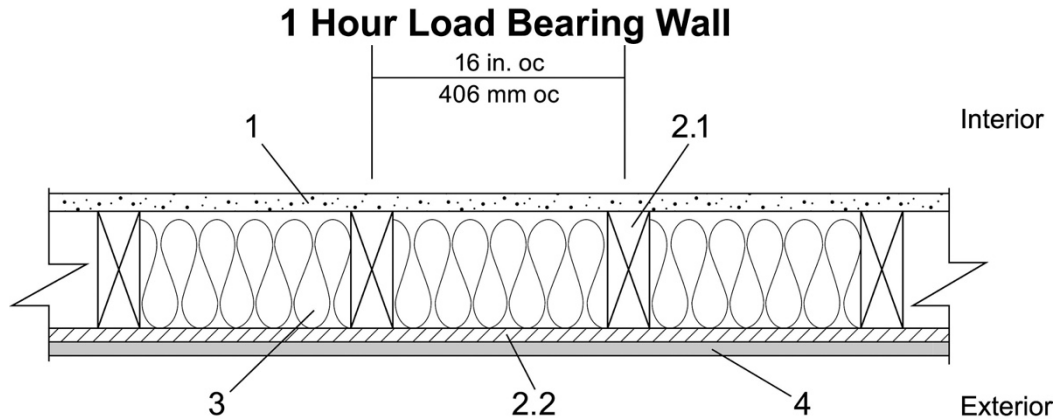
 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>PLYWOOD</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: ASTM E84 30 MINUTE TEST: 25 or less</p> <p>SPIB Monitored (AA-680)</p> <p>STD-PWFR-19</p>	 <p style="text-align: center;">Interior Type A High Temperature (HT) Fire Retardant Treated Wood <b>ESR-4373 KDAT</b></p> <p style="text-align: center;">Species Year</p> <p style="text-align: center;">Treater Name • Location</p>	<p><b>LUMBER</b></p> <p>FLAME SPREAD/SMOKE DEVELOPED: ASTM E84 30 MINUTE TEST: 25 or less</p> <p>SPIB Monitored (AA-680)</p> <p>STD-PWFR-19</p>
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FIGURE 1—LUMBER AND PLYWOOD STAMPS



**Fire Retardant Wood ProWood® FR Lumber and Plywood**  
**ASTM E119 Rating: 1 Hour Load Bearing (2015 NDS – F 0.96 for FRWT)**  
**Rated from One Side (Interior Side Only)**

**1 Hour Rated – Interior Side Only**

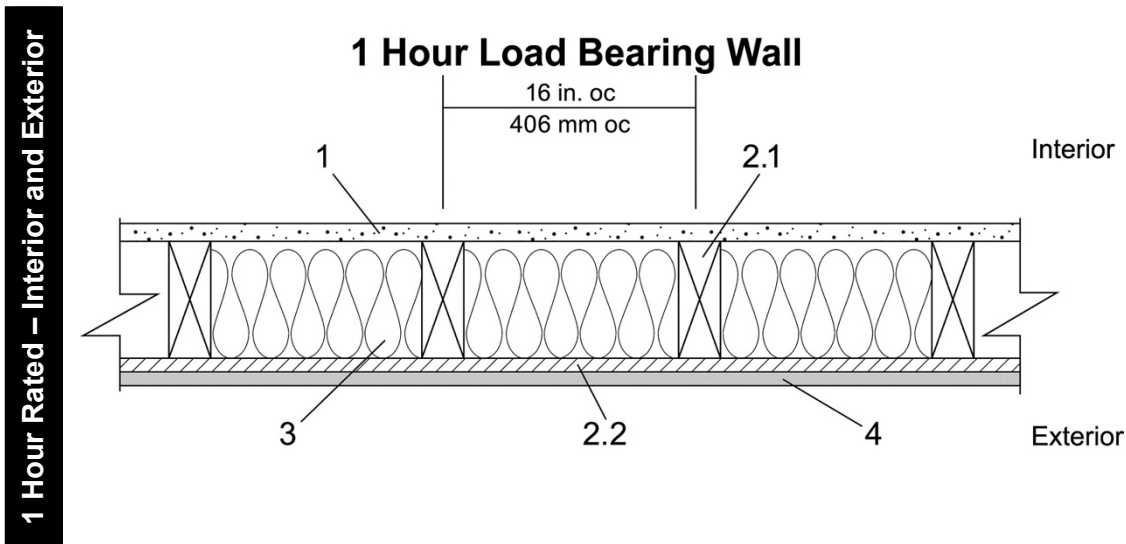


1. **Gypsum Board (Interior):** One-layer Type X, complying with ASTM C1396, min. 5/8 in. thick, 4 feet wide applied vertically, fastened to framing. Joints covered with paper tape and joint compound. Min. #6 x 1-5/8 in. long Type S or W screws spaced max. 6 in. on center (o.c.) and heads covered with joint compound.
2. **Manufacturer:** UFP Industries, Inc.  
**Product:** ProWood® FR
- 2.1 **Model:** ProWood® FR Lumber  
 ProWood® FR Lumber is min. 2x4 in. nominal wood studs, spaced max. 16 in. o.c., or 2x6 in. nominal wood studs spaced 24 in. o.c., double top plates and single bottom plate fastened together with 16d common nails (3-1/2 in. x 0.162 in.), 16d box nails (3-1/2 in. x 0.135 in.), or 12d ring nails (3-1/4 in. x 0.135 in.).
- 2.2 **Model (Exterior):** ProWood® FR Plywood  
 ProWood® FR Plywood, min. 15/32 in. thick, applied vertically over the specified framing with min. 2-3/8 in. long, 0.113 in. diameter nails, spaced max. 8 in. o.c. around the perimeter and max. 12 in. o.c. in the field. Horizontal joints must be blocked.
3. **Insulation:** Fiberglass Class A batt insulation min. 3-1/2 in. thick, R-13 friction fit between the studs. If 2x6 in. nominal wood studs are used, fiberglass batt insulation shall be min. 5-1/2 in. thick.
4. **Exterior Facings (Optional):** Materials installed in accordance with manufacturer's installation instructions:
  - Masonry brick veneer or concrete
  - Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat
  - Hardboard, wood structural panel, plywood, or fiber-cement siding
  - Metal siding
  - Vinyl siding - exterior plastic

**FIGURE 2—ONE-HOUR FIRE RESISTANCE ASSEMBLY**



**Fire Retardant Wood ProWood® FR Lumber and Plywood**  
**ASTM E119 Rating: 1 Hour Load Bearing (2015 NDS – F 0.96 for FRWT)**  
**Rated from Interior and Exterior**



**1. Gypsum Board (Interior):** One-layer Type X complying with ASTM C1396, min. 5/8 in. thick, 4 feet wide applied vertically, fastened to framing. Joints covered with paper tape and joint compound. Min. #6 x 1-5/8 in. long Type S or W screws spaced max. 6 in. on center (o.c.) and heads covered with joint compound.

**2. Manufacturer:** UFP Industries, Inc.  
**Product:** ProWood® FR

**2.1 Model:** ProWood® FR Lumber

ProWood® FR Lumber is min. 2x4 in. nominal wood studs, spaced max. 16 in. o.c., or 2x6 in. nominal wood studs spaced 24 in. o.c., double top plates and single bottom plate fastened together with 16d common nails (3-1/2 in. x 0.162 in.), 16d box nails (3-1/2 in. x 0.135 in.), or 12d ring nails (3-1/4 in. x 0.135 in.).

**2.2 Model (Exterior):** ProWood® FR Plywood

ProWood Plywood, min. 15/32 in. thick, applied vertically over the specified framing with min. 2-3/8 in. long, 0.113 in. diameter nails, spaced max. 8 in. o.c. around the perimeter and max. 12 in. o.c. in the field. Horizontal joints must be blocked.

**3. Insulation:** Fiberglass Class A batt insulation min. 3-1/2 in. thick R-13 friction fit between the studs. If 2x6 in. nominal wood studs are used, fiberglass batt insulation shall be min. 5-1/2 in. thick.

**1. Exterior Facings:** Materials installed in accordance with manufacturer's installation instructions:

- 3/4 in. thick cement plaster (1:4 ratio of cement to sand for scratch coat and 1:5 ratio for brown coat)
- Nominal 2.7 in. thick solid brick fastened using min. 22 GA wall ties
- Nominal 2.3 in. thick hollow brick fastened using min. 22 GA wall ties

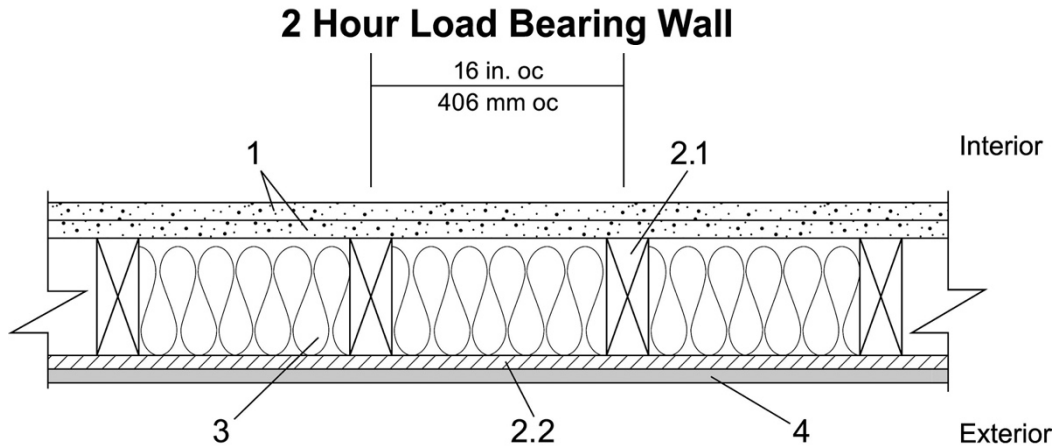
**FIGURE 3—ONE-HOUR FIRE RESISTANCE ASSEMBLY**





**Fire Retardant Wood ProWood® FR Lumber and Plywood**  
**ASTM E119 Rating: 2 Hour Load Bearing (2015 NDS – F 0.96 for FRWT)**  
**Rated from One Side (Interior Side Only)**

**2 Hour Rated – Interior Side Only**



**1. Gypsum Board (Interior):** Two-layers Type C USG Firecode® C Core complying with ASTM C1396, min. 5/8 in thick, 4 feet wide applied vertically, fastened to framing. Face layer joints staggered with base layer and covered with paper tape and joint compound.

**Fasteners (Not Shown):**

**Face Layer-** Min. #6 x 2 in. long Type S or W screws spaced max. 8 in. on center (o.c.) and heads covered with joint compound.

**Base Layer -** Min. #6 x 1-5/8 in in. long Type S or W screws, spaced max. 6 in. o.c.

**2. Manufacturer:** UFP Industries, Inc.

**Product:** ProWood® FR

**2.1 Model:** ProWood® FR Lumber

ProWood® FR Lumber is min. 2x4 in. nominal wood studs, spaced max. 16 in. o.c., or 2x6 in. nominal wood studs spaced 24 in. o.c., double top plates and single bottom plate fastened together with 16d common nails (3-1/2 in. x 0.162 in.), 16d box nails (3-1/2 in. x 0.135 in.), or 12d ring nails (3-1/4 in. x 0.135 in.).

**2.2 Model (Exterior):** ProWood® FR Plywood

ProWood® FR Plywood, min. 15/32 in. thick, applied vertically over the specified framing with min. 2-3/8 in. long, 0.113 in. diameter nails, spaced max. 8 in. o.c. around the perimeter and max. 12 in. o.c. in the field. Horizontal joints must be blocked.

**3. Insulation:** Fiberglass Class A batt insulation min. 3-1/2in. thick R-13 friction fit between the studs. If 2x6 in. nominal wood studs are used, fiberglass batt insulation shall be min. 5-1/2 in. thick.

**4. Exterior Facings (Optional):** Materials installed in accordance with manufacturer's installation instructions:

- Masonry brick veneer or concrete
- Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat
- Hardboard, wood structural panel, plywood, or fiber-cement siding
- Metal siding
- Vinyl siding - exterior plastic

**FIGURE 4—TWO-HOUR FIRE RESISTANCE ASSEMBLY**

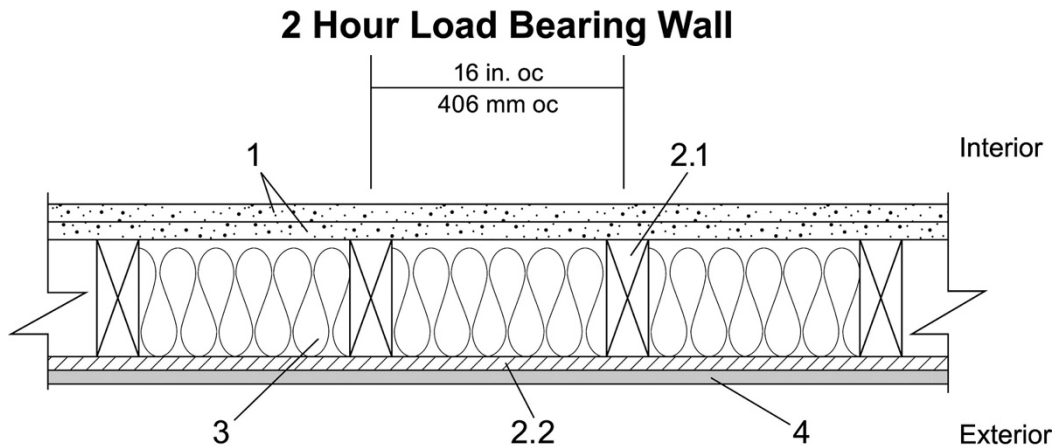


## Fire Retardant Wood ProWood® FR Lumber and Plywood

ASTM E119 Rating: 2 Hour Load Bearing (2015 NDS – F 0.96 for FRWT)

Rating: 2 Hour Load Bearing from the Interior and 1 Hour Load Bearing from the Exterior

2 Hour Rated Interior & 1 Hour Rated Exterior



**1. Gypsum Board (Interior):** Two-layers Type C USG Firecode® C Core complying with ASTM C1396, min. 5/8 in. thick, 4 feet wide applied vertically, fastened to framing. Face layer joints staggered with base layer and covered with paper tape and joint compound.

#### Fasteners (Not Shown):

**Face Layer-** Min. #6 x 2 in. long Type S or W screws spaced max. 8 in. on center (o.c.) and heads covered with joint compound.

**Base Layer -** Min. #6 x 1-5/8 in. long Type S or W screws, spaced max. 6 in. o.c.

**2. Manufacturer:** UFP Industries, Inc.

**Product:** ProWood® FR

**2.1 Model:** ProWood® FR Lumber

ProWood® FR Lumber is min. 2x4 in. nominal wood studs, spaced max. 16 in. o.c., or 2x6 in. nominal wood studs spaced 24 in. o.c., double top plates and single bottom plate fastened together with 16d common nails (3-1/2 in. x 0.162 in.), 16d box nails (3-1/2 in. x 0.135 in.), or 12d ring nails (3-1/4 in. x 0.135 in.)

**2.2 Model (Exterior):** ProWood® FR Plywood

ProWood® FR Plywood, min. 15/32 in. thick, applied vertically over the specified framing with min. 2-3/8 in. long, 0.113 in. diameter nails, spaced max. 8 in. o.c. around the perimeter and max. 12 in. o.c. in the field. Horizontal joints must be blocked.

**3. Insulation:** Fiberglass Class A batt insulation min. 3-1/2 in. thick R-13 friction fit between the studs. If 2x6 in. nominal wood studs are used, fiberglass batt insulation shall be min. 5-1/2 in. thick R-19.

**4. Exterior Facings:** Materials installed in accordance with manufacturer's installation instructions:

- 3/4 in. thick cement plaster (1:4 ratio of cement to sand for scratch coat and 1:5 ratio for brown coat)
- Nominal 2.7 in. thick solid brick fastened using min. 22 GA wall ties
- Nominal 2.3 in. thick hollow brick fastened using min. 22 GA wall ties

FIGURE 5—TWO-HOUR FIRE RESISTANCE ASSEMBLY

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190306-R39833  
**Report Reference** R39833-20190305  
**Issue Date** 2019-MARCH-06

**Issued to:** UNIVERSAL FOREST PRODUCTS INC  
2801 E BELTLINE AVE NE  
GRAND RAPIDS MI 49525-9680

**This certificate confirms that  
representative samples of**

TREATED PLYWOOD  
Douglas Fir and Southern Yellow Pine plywood treated by  
pressure impregnation to reduce combustibility.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.


**Standard(s) for Safety:** UL 723, Surface Burning Characteristics for Building  
Materials.

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up  
Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's  
Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20190306-R39836  
**Report Reference** R39836-20190305  
**Issue Date** 2019-MARCH-06

**Issued to:** UNIVERSAL FOREST PRODUCTS INC  
2801 E BELTLINE AVE NE  
GRAND RAPIDS MI 49525-9680

**This certificate confirms that  
representative samples of**

LUMBER, TREATED  
Douglas Fir, Southern Yellow Pine, Ponderosa Pine, Red  
Pine, Hem/Fir, White Fir, Western Hemlock, Alpine Fir,  
White Spruce, Lodgepole Pine, SPF, Jack Pine, Balsam Fir,  
Red Spruce, Black Spruce, Engelmann Spruce.

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

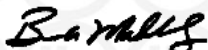
**Standard(s) for Safety:** UL 723, Surface Burning Characteristics for Building  
Materials.

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up  
Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's  
Follow-Up Services.

Look for the UL Certification Mark on the product.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

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contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CERTIFICATE OF COMPLIANCE



**UFP Industries, Inc.**  
ProWood FR

136710-410  
Certificate Number

01/30/2009 - 01/28/2021  
Certificate Period

Certified  
Status

UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

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Wall finishes are determined compliant using an Office Environment with an air change of  $0.68 \text{ hr}^{-1}$  and a loading of  $33.40 \text{ m}^2$ .  
Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.



*UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.*

## GREENGUARD Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC <sup>(A)</sup>	-	0.50	mg/m <sup>3</sup>
Formaldehyde	50-00-0	61.3 (50 ppb)	µg/m <sup>3</sup>
Total Aldehydes <sup>(B)</sup>	-	0.10	ppm
Particle Matter less than 10 µm <sup>(C)</sup>	-	50	µg/m <sup>3</sup>
4-Phenylcyclohexene	4994-16-5	6.5	µg/m <sup>3</sup>
Individual VOCs <sup>(D)</sup>	-	1/10th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C<sub>6</sub> – C<sub>16</sub> range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m<sup>3</sup>) fall in the range of 0.5 mg/m<sup>3</sup> or less, as specified in CDPH Standard Method v1.1.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



# CERTIFICATE OF COMPLIANCE



## UFP Industries, Inc. ProWood FR

136710-420

Certificate Number

01/30/2009 - 01/28/2021

Certificate Period

Certified

Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Building products and interior finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office and Classroom Environment.

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.



*UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.*

## GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC <sup>(A)</sup>	-	0.22	mg/m <sup>3</sup>
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m <sup>3</sup>
Total Aldehydes <sup>(B)</sup>	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m <sup>3</sup>
Particle Matter less than 10 µm <sup>(C)</sup>	-	20	µg/m <sup>3</sup>
1-Methyl-2-pyrrolidinone <sup>(D)</sup>	872-50-4	160	µg/m <sup>3</sup>
Individual VOCs <sup>(E)</sup>	-	1/2 CREL or 1/100th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C<sub>6</sub> – C<sub>16</sub> range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m<sup>3</sup>) fall in the range of 0.5 mg/m<sup>3</sup> or less, as specified in CDPH Standard Method v1.2.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m<sup>3</sup>/day
- (E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).







## 50-YEAR LIMITED WARRANTY (United States Only)

**IMPORTANT: This is your warranty certificate. Attach your invoice and proof of purchase.**

UFP Warranty Corporation ("Warrantor") is pleased to offer this 50-year Limited Warranty to you, the installer of a ProWood® FR Lumber or plywood product (the "Product(s)").

**ATTENTION:** This Limited Warranty is only valid on Products purchased after May 1, 2019 and used in the continental United States, Alaska, and Hawaii in an interior application.

### INSTALLER COVERAGE

To qualify for this warranty, you must be the installer of the Products on real property that you own or is owned by a third party. This Limited Warranty is not transferable.

### TO IDENTIFY A PROWOOD® FR PRODUCT, LOOK FOR THE INK STAMP

It's easy to identify a Product. Simply look for the ink stamp on each Product. Make sure you retain the purchase receipt(s). In the event of a claim, it will be necessary to present this documentation for all Products that are claimed to have structurally failed.

### LIMITED WARRANTY

For a period of fifty (50) years from the date of installation, Warrantor will provide installers who use a Product in an interior application that structurally fail the reasonable cost of repair of the damaged portion of the structure incorporating the Product. This remedy is the installer's sole and exclusive remedy for any Product that structurally fails. For the purposes of this Limited Warranty, "structurally fails" means a reduction in strength below the strength properties published in ESR-4373 caused by the fire retardant chemical in the Product. For clarity, Warrantor is not liable for any structural failure not due to the fire retardant chemical in the Product, and Warrantor is not liable for any damage other than to the Product and any portion of the structure incorporating the Product due to a structural failure.

In addition, while a structure may contain fire retardant treated wood products other than the Products, this warranty does not cover structural failure of fire retardant treated wood products other than the Products.

### LIMITATIONS ON WARRANTY

Warrantor will not be required to provide warranty coverage for any Product that:

- Is installed other than in an interior application and as specified on the ink stamp;
- Is used in an unprotected exterior environment;
- Is sawn lengthwise (ripped) or surfaced (sanded/planed/etc.), except that a Product that is plywood may be ripped;
- Has been subjected to "weathering", including, but not limited to, raised grain, splitting, checking, cupping, twisting, warping, shrinkage, swelling, or any other physical or aesthetic property of the wood;
- Delaminates, including delamination of plywood and other laminated wood products;
- Has mold, mildew, or fungal growth;
- Corrodes fasteners, hardware, or any other material(s), including metal materials used, in conjunction with, or to wrap or encapsulate a Product, or structural failure resulting from such an occurrence;
- Is subjected to fire or improper or inadequate ventilation;
- Is used in any Use Category higher than AWPA UC2 (protected from weather but may be subject to sources of moisture);
- Is damaged by physical abuse, acts of God, acts of war, fire, floods (natural or plumbing failure), nature disaster, or other chemical or biological factors;
- Is damaged as a result of deterioration, defects, or failure of building components, including, without limitation, movement, distortion, collapse, or settling of the supporting structure on which the Product is installed;
- Is damaged as a result of a failure of the design of the system used in connection with the installation of the Products;
- Has not been installed in strict accordance with all applicable laws, zoning and/or building codes, and generally accepted construction practices, including, without limitation, the National Forest Product Association's National Design Specification and the American Plywood Association's Plywood Design Standard(s) (if no building codes apply, the Product must only be used and installed in applications that meet the International One and Two-Family Dwelling Code or the International Building Code in effect at the time of construction);
- Has not been approved by the building code authority having jurisdiction over the structure;
- Has not been installed in accordance with Warrantor's installation procedures;
- Has been installed in a roof application, except if (1) the roof application was designed to an industry recognized design customarily used in the construction industry, (2) the attic and/or roof assembly has not exceeded temperatures of 150°F at any time, and (3) all Products used had a minimum of 7/16" in thickness and a minimum of 4 plies;
- Has been abused or placed under or subjected to abnormal use conditions;
- Has not been handled or stored in a covered and protected manner prior to installation;
- Has been subjected to temperatures in excess of 150°F (lumber) and 170° (plywood);
- Is exposed to roof leaks;
- Is exposed to long-term cyclical heat and humidity at temperatures in excess of 150°F (lumber) and 170° (plywood) from time to time;
- Has been used, modified, or otherwise treated in any manner other than as intended by Warrantor;
- Has been installed in-ground or with soil contact;
- Has been installed where the Product is usually immersed in water;
- Has been subjected to regular or continuous contact with water;
- Has been subjected to abnormal environmental conditions, including, but not limited to, air pollution, mold, or mildew; or
- Have not been maintained in a reasonable manner.

Failure to follow any restrictions or warnings supplied with Products shall make the Limited Warranty null and void and of no further effect. Warrantor reserves the right to investigate any claim and inspect the Products for which a claim is made. Any use of the Products must be in accordance with all local zoning and/or building codes. You assume all risk and liability associated with the use of this Product. You should take all necessary steps to ensure the safety of everyone involved in the project, including, but not limited to, wearing the appropriate safety equipment. If a claim is made under this Limited Warranty on a Product that is no longer available, Warrantor reserves the right to substitute a similar product of equivalent value.

**IMPORTANT: This is your warranty certificate. Attach your invoice and proof of purchase.**

THIS WARRANTY SETS FORTH THE ENTIRE RESPONSIBILITY OF THE WARRANTOR. WARRANTOR HEREBY DISCLAIMS ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. WARRANTOR SHALL NOT BE LIABLE FOR ANY INCIDENTAL, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF PROFITS, LOSS OF BUSINESS, OR DELAY DAMAGES, ARISING OUT OF THE PURCHASE, USE, OR OWNERSHIP OF THE PRODUCT. PURCHASE OF THE PRODUCT IS ACCEPTANCE OF THE TERMS OF THIS WARRANTY.

**CLAIM PROCEDURE**

To make a claim under this Warranty, you must, within thirty (30) days of actual or constructive notice of damage covered by this Warranty, do the following:

1. Assemble the following information:
  - a. An itemized list of the Products that failed
  - b. Proof of Purchase of the product, as shown on the original invoice/receipt
  - c. End tag from each Product and/or a photograph or other evidence of the ink stamp from each Product
  - d. Photograph(s) and a description of the alleged defect
2. Mail the above information to: **UFP Warranty Corp.**  
Warranty Information  
2801 East Beltline Ave. NE  
Grand Rapids, MI 49525
3. Upon the request of Warrantor, you will permit Warrantor or its representatives a reasonable time to inspect the Products for which a claim has been filed. Any failure to allow such inspection will void this Limited Warranty with respect to the filed claims. In addition, if you take remedial measures (including, without limitation, not leaving the Product in its installed condition, modifying it, adjusting it, repairing it, or attempting to repair it) prior to Warrantor's inspection, then this Limited Warranty will be voided with respect to the Products for which remedial measures have been taken.
4. Warrantor, in its sole discretion, may arrange for a certified independent testing agency to conduct strength tests of the Products. If requested, samples of the Products claimed to have structurally failed must be sent to Warrantor along with proof that the Products were removed from the structure in question. If the certified independent testing agency determines that the Product has not structurally failed, installer shall be responsible for all costs related to testing. Warrantor reserves the right to conduct additional sampling and testing.
5. Subject to the terms, conditions, limitations and exclusions of this Limited Warranty, Warrantor will, within sixty (60) days from the date of receipt of notice of your claim, and upon receipt of the proper documentation (including test results), make available to you the reasonable cost of repair of the damaged portion of the structure incorporating the Products.

**Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion of incidental, indirect, special, or consequential damages, so the above limitations and exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have additional rights that vary from state to state.**

**THERE ARE NO OTHER WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY.**





Safety Data Sheet  
UFP Retail, LLC.



**Section 1 - PRODUCT AND COMPANY IDENTIFICATION**

**Material Name**

Wood Treated with Fire-Retardant Materials

**Trade Names**

Prowood® FR

**Chemical Family**

Treated wood

**Product Use**

Where using wood or plywood with fire retardant properties is desired.

**Restrictions on Use**

None known.

**Details of the supplier of the safety data sheet**

<b>Company name:</b>	UFP Retail, LLC
<b>Address</b>	2801 East Beltline, NE, Grand Rapids MI 49525
<b>Telephone number</b>	616-365-1526
<b>Contact person</b>	Regulatory Compliance
<b>Emergency phone number</b>	Chemtrec 1-800-429-9300
<b>E-mail</b>	<a href="mailto:compliance@ufpi.com">compliance@ufpi.com</a>

**Section 2 - HAZARDS IDENTIFICATION**

**Classification in accordance with paragraph (d) of 29 CFR 1910.1200.**

Combustible Dust

Skin Corrosion/Irritation - Category 2

Serious Eye Damage/Eye Irritation - Category 2A

Carcinogenicity - Category 1A

Reproductive Toxicity - Category 1B

Specific target organ toxicity - Single exposure - Category 3 (Respiratory system)

**GHS Label Elements**

**Symbol(s)**



**Signal Word**

Danger

**Hazard Statement(s)**

May form combustible dust concentrations in air.

Causes skin irritation.

Causes serious eye irritation.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

# Safety Data Sheet

UFP Retail, LLC

## Precautionary Statement(s)

### Prevention

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

### Response

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

Call a POISON CENTER or doctor if you feel unwell.

Specific treatment (see label).

### Storage

Store in a well-ventilated place.

### Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other Hazards

None known.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS	Component Name	Percent
N/A	Wood/Wood dust	85-99
Proprietary	Proprietary Ingredient #1	1-4
Proprietary	Proprietary Ingredient #2	0.25-2
10043-35-3	Boric acid (H <sub>3</sub> BO <sub>3</sub> )	0.25-1
N/A	Glue solids (plywood only)	4 - 8

Depending on the additives applied to the treating solution, this wood may also contain <0.1% of mold inhibitors and/or <0.1% of a colorant. The chemical identity and/or percentage of composition is being withheld as a trade secret. Plywood produced by others is bonded with various low-formaldehyde emission bonding systems.

## Section 4 - FIRST AID MEASURES

### Inhalation

Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals.

### Skin

Take off contaminated clothing. Wash skin thoroughly with soap and water. Seek medical attention. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation

# Safety Data Sheet

UFP Retail, LLC.

to the skin. Abrasive handling or rubbing of the treated wood may increase skin irritation. Some wood species, regardless of treatment, may cause dermatitis or allergic skin reactions in sensitized individuals.

## Eyes

DO NOT rub eyes. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.

## Ingestion

Rinse mouth. If swallowed, get medical attention.

## Most Important Symptoms/Effects

### Acute

Causes respiratory tract irritation, skin irritation, eye irritation, allergic reactions. WOOD DUST: May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

### Delayed

May cause cancer by inhalation. May damage fertility or the unborn child.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically. May aggravate respiratory ailments such as asthma and bronchitis.

## Section 5 - FIRE FIGHTING MEASURES

### Extinguishing Media

#### Suitable Extinguishing Media

Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

#### Unsuitable Extinguishing Media

Do not scatter spilled material with high-pressure water streams.

#### Special Hazards Arising from the Chemical

Combustible dust. May form combustible dust concentrations in air. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Depending on moisture content, and more importantly, particle diameter and airborne concentration, wood dust in a contained area may explode in the presence of an ignition source. Wood dust may similarly deflagrate (combustion without detonation like an explosion) if ignited in an open or loosely contained area. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. Reference NFPA Standards- 654 and 664 for guidance.

#### Hazardous Combustion Products

Oxides of carbon, oxides of nitrogen.

#### Fire Fighting Measures

Wet down with water to reduce likelihood of ignition or dispersion. Move material from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Keep unnecessary people away, isolate hazard area and deny entry. The presence of the fire-retardant chemical in treated wood may reduce the flammability hazard to some extent.

#### Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

## Section 6 - ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

Eliminate all sources of ignition. Wear personal protective clothing and equipment, see Section 8. Avoid dust generation and accumulation. Avoid dust formation. Avoid breathing dust.

# Safety Data Sheet

UFP Retail, LLC.

## Methods and Materials for Containment and Cleaning Up

Collect material in appropriate container for disposal. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect using a vacuum cleaner with a HEPA filter or wet and scoop up dry spills. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid sweeping spilled dry material. If sweeping of a contaminated area is necessary, use a dust suppressant agent. Eliminate all sources of ignition. Keep unnecessary people away, isolate hazard area and deny entry.

## Environmental Precautions

Avoid release to the environment.

## Section 7 - HANDLING AND STORAGE

### Precautions for Safe Handling

Avoid breathing dust. Avoid contact with skin and eyes. Wash thoroughly after handling. Wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace. Use only outdoors or in a well-ventilated area. Wear protective gloves/clothing and eye/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Dry wood dust material is defined as having a water content less than 25% by weight. Sweep or vacuum but avoid generating dust. Avoid working with freshly treated wood. Do not burn treated wood. Gently moisten dust before it is collected. Clothing should be removed and replaced if it becomes wet due to contact with freshly treated wood.

### Conditions for Safe Storage, Including any Incompatibilities

Store in a well-ventilated place.

Store and handle in accordance with all current regulations and standards. Avoid heat, flames, sparks and other sources of ignition. Store containers in a cool, dry, well-ventilated place. Store away from incompatible materials (see Section 10, Stability and Reactivity).

### Incompatible Materials

strong oxidizing agents, reducing agents.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### Component Exposure Limits

Wood/Wood dust	N/A
ACGIH:	1 mg/m <sup>3</sup> TWA Inhalable fraction
NIOSH:	1 mg/m <sup>3</sup> TWA dust
OSHA (US):	5 mg/m <sup>3</sup> PEL (respirable dust); 15 mg/m <sup>3</sup> PEL (total fraction)
Boric acid (H <sub>3</sub> BO <sub>3</sub> )	10043-35-3
ACGIH:	2 mg/m <sup>3</sup> TWA inhalable particulate matter
	6 mg/m <sup>3</sup> STEL inhalable particulate matter

### ACGIH - Threshold Limit Values - Biological Exposure Indices (BEI)

There are no biological limit values for any of this product's components.

### Engineering Controls

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Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Ensure compliance with applicable exposure limits.

## Individual Protection Measures, such as Personal Protective Equipment

### Eye/face protection

Wear safety glasses with side shields or chemical safety goggles.

### Skin Protection

Wear appropriate work clothing. Wear fire/flammable resistant/retardant clothing. Refer to NFPA 2112, Standard on Flame-Resistant Garments for Protection of Industrial Personnel Against Flash Fire and NFPA 2113, Standard on the Selection, Use, Care and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Short-duration Thermal Exposures from Fire (2015).

### Respiratory Protection

If engineering controls do not maintain airborne concentrations to a negligible level, an approved respirator must be worn. A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be appropriate under certain circumstances where airborne concentrations are expected to exceed exposure limits.

### Glove Recommendations

Wear general purpose work gloves: flame-resistant.

## Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	brown solid	<b>Physical State</b>	solid
<b>Odor</b>	Wood odor	<b>Color</b>	brown
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not applicable
<b>Melting Point</b>	Not applicable	<b>Boiling Point</b>	Not applicable
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable	<b>Flammability (solid, gas)</b>	Combustible dust
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not applicable
<b>Vapor Density (air=1)</b>	Not applicable	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	(Insoluble)	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not applicable	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	Not available
<b>Physical Form</b>	solid	<b>Molecular Weight</b>	Not available

### Other Information

No additional information is available.

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## Section 10 - STABILITY AND REACTIVITY

### Reactivity

No reactivity hazard is expected.

### Chemical Stability

Stable at normal temperatures and pressure.

### Possibility of Hazardous Reactions

Will not polymerize.

### Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition. Avoid accumulation of airborne dusts. Avoid contact with incompatible materials.

### Incompatible Materials

strong oxidizing agents, reducing agents.

### Hazardous decomposition products

oxides of carbon, oxides of nitrogen, aliphatic aldehydes, Polycyclic aromatic hydrocarbons.

## Section 11 - TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

#### Inhalation

May cause respiratory irritation, allergic reactions, nasal cancer. WOOD DUST: Dust may be irritating to the nose and throat. Prolonged exposure to wood dusts by inhalation has been reported to be associated with nasal and paranasal cancer. May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation.

#### Skin Contact

Causes irritation, allergic reactions. Skin contact with wood dusts may cause erythema, blistering, and sometimes erosion and secondary infections occur. May cause eczema-like skin disorders (dermatitis).

#### Eye Contact

Causes serious eye irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing.

#### Ingestion

Ingestion of harmful amounts is unlikely. Ingestion of dusts generated during working operations may cause nausea and vomiting. Certain species of wood and their dusts may contain natural toxins, which can have adverse effects in humans.

#### Acute and Chronic Toxicity

##### Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

##### Proprietary Ingredient #1 (Proprietary)

Oral LD50 Rat >2000 mg/kg

Dermal LD50 Rabbit >5000 mg/kg

##### Proprietary Ingredient #2 (Proprietary)

Oral LD50 Rat 5750 mg/kg

Dermal LD50 Rabbit >7940 mg/kg

##### Boric acid (H3BO3) (10043-35-3)

Oral LD50 Rat 2660 mg/kg

Dermal LD50 Rabbit >2000 mg/kg

Inhalation LC50 Rat >0.16 mg/L 4 h (no deaths occurred)

#### Product Toxicity Data

##### Acute Toxicity Estimate



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Dermal	> 2000 mg/kg
Oral	> 2000 mg/kg

## Immediate Effects

Causes respiratory tract irritation, skin irritation, eye irritation, allergic reactions. May cause nasal dryness, irritation and mucostasis. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported. Depending on wood species may cause respiratory sensitization and/or irritation. Symptoms can include irritation, redness, scratching of the cornea, and tearing. May cause eczema-like skin disorders (dermatitis). Airborne treated or untreated wood dust may cause nose, throat, or lung irritation and other respiratory effects.

## Delayed Effects

May cause allergic reactions, nasal cancer. Prolonged or repeated inhalation of wood dusts may cause recurrent bronchitis. Prolonged exposure to wood dusts by inhalation has been reported to be associated with nasal and paranasal cancer. Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis.

## Irritation/Corrosivity Data

Causes skin irritation, eye irritation, respiratory tract irritation.

## Respiratory Sensitization

Prolonged or repeated exposure may result in hypersensitivity.

## Dermal Sensitization

Repeated exposure may result in contact or sensitization dermatitis.

## Component Carcinogenicity

Wood/Wood dust	N/A
IARC:	Monograph 100C [2012]; Monograph 62 [1995] (related to Wood dust, all soft and hard woods) (Group 1 (carcinogenic to humans))
NTP:	Known Human Carcinogen (related to Wood dust, all soft and hard woods)
DFG:	Category 3B (could be carcinogenic for man; except beech and oak wood dust) (related to Wood dust, all soft and hard woods)
OSHA:	Present (related to Wood dust, all soft and hard woods)
NIOSH:	potential occupational carcinogen (related to Wood dust, all soft and hard woods)
Boric acid (H <sub>3</sub> BO <sub>3</sub> )	10043-35-3
ACGIH:	A4 - Not Classifiable as a Human Carcinogen

May cause cancer by inhalation. Untreated wood dust or saw dust: The International Agency for Research on Cancer (IARC) classifies untreated wood dust as a Group I human carcinogen. The classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures of untreated wood dust. Epidemiological studies have been reported on carcinogenic risks of employment in the furniture making industry, the carpentry industry, and the lumber and sawmill industry. IARC has reviewed these studies and reports that there is sufficient evidence that nasal carcinomas have been caused by employment in the furniture-making industry where the excess risk is associated with exposure to untreated wood dust or sawdust from hardwood species. IARC concluded that epidemiological data are not

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sufficient to make a definite assessment of the carcinogenic risk of employment as a carpenter or worker in a lumber mill or sawmill.

## Germ Cell Mutagenicity

No data available.

## Tumorigenic Data

No data available

## Reproductive Toxicity

May damage fertility or the unborn child.

## Specific Target Organ Toxicity - Single Exposure

respiratory system

## Specific Target Organ Toxicity - Repeated Exposure

No target organs identified.

## Aspiration hazard

No data available.

## Medical Conditions Aggravated by Exposure

respiratory disorders, skin disorders and allergies

## Section 12 - ECOLOGICAL INFORMATION

### Component Analysis - Aquatic Toxicity

<b>Proprietary Ingredient #1</b>	<b>Proprietary</b>
Fish:	LC50 96 h Oncorhynchus mykiss 26.5 mg/L; LC50 96 h Oncorhynchus mykiss 24.8 - 29.4 mg/L [flow-through]; LC50 96 h Pimephales promelas 3.3 mg/L; LC50 96 h Pimephales promelas 33 mg/L [static]
<b>Boric acid (H<sub>3</sub>BO<sub>3</sub>)</b>	<b>10043-35-3</b>
Invertebrate:	EC50 48 h Daphnia magna 115 - 153 mg/L EPA

### Persistence and Degradability

No data available.

### Bioaccumulative Potential

No data available.

### Mobility

insoluble in water

### Other Toxicity

No data available.

## Section 13 - DISPOSAL CONSIDERATIONS

### Disposal Methods

Dispose in accordance with all applicable regulations.

### Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

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## Section 14 - TRANSPORT INFORMATION

### US DOT Information:

UN/NA #: Not regulated.

### IATA Information:

UN#: Not regulated.

### IMDG Information:

UN#: Not regulated.

### International Bulk Chemical Code

This material contains one or more of the following chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

Proprietary Ingredient #1	Proprietary
IBC Code:	Category Z (solution)

### Further information

Component Marine Pollutants This material does not contain any chemicals listed on the Hazardous Materials Table required by US DOT to be identified as a marine pollutant.

## Section 15 - REGULATORY INFORMATION

### U.S. Federal Regulations

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

### SARA Section 311/312 (40 CFR 370 Subparts B and C) reporting categories

Combustible Dust; Carcinogenicity; Reproductive Toxicity; Skin Corrosion/Irritation; Serious Eye Damage/Eye Irritation; Specific Target Organ Toxicity

### U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Wood/Wood dust	N/A	No	No	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

- ⚠ **WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).

### Canada Regulations

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL

Boric acid (H3BO3)	10043-35-3
	1 %

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**Component Analysis - Inventory**

**Wood/Wood dust (N/A)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
No	No	No	No	No	No	No	No	No	No	No	No	No	No	No

**Proprietary Ingredient #1 (Proprietary)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Proprietary Ingredient #2 (Proprietary)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**Boric acid (H3BO3) (10043-35-3)**

US	CA	EU	AU	PH	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2	KR - REACH CCA	CN	NZ	MX	TW	VN (Draft)
Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes

**U.S. Inventory (TSCA)**

All components of this product are in compliance.

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## Section 16 - OTHER INFORMATION

### NFPA Ratings

Health: 2 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### Preparation Date

Issue date: 2/15/2018

Revision date: 1/20/2020

Revision number: 3

### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/ Lethal Concentration; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne- Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL- Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH- Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

### Other Information

#### Disclaimer:

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