



SAFETY DATA SHEET

UNIVERSAL FOREST PRODUCTS, INC.



1. Identification

Product identifier	ProWood® Preserved with CA-C	
Other means of identification	End tag will be marked "CAC", Synonyms: copper azole	
Synonyms	Copper Azole, Copper Azole type C	
SDS number	UFP-CAC-1	
Recommended use	Preservative Treated Wood for various interior and exterior applications.	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Company name	Universal Forest Products, Inc.	
Address	2801 E Beltline, NE, Grand Rapids, MI 40525	
Telephone number	616-365-1526	
Contact person	Regulatory Compliance	
Emergency phone number	CHEMTREC:	1-800-424-9300
E-mail	rdickens@ufpi.com	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
	Carcinogenicity (inhalation)	Category 1A
OSHA defined hazards	Combustible dust	
Label elements		



Signal word	Danger
Hazard statement	May cause cancer by inhalation. May cause an allergic skin reaction. May form combustible dust concentrations in air.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Prevent dust accumulation to minimize explosion hazard. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Wash thoroughly after handling. Observe good industrial hygiene practices.
Response	If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use CO2, foam or water spray for extinction.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Wood/Wood dust	N/A	> 90
Copper Carbonate (expressed as elemental copper)	12069-69-1	< 1
Tebuconazole	107534-96-3	< 1
Propiconazole	60207-90-1	< 1
Glue Solids (plywood only) ¹	N/A	4 - 8

Composition comments

1. All concentrations are in percent by weight unless ingredient is a gas. Depending on the additives applied to the treating solution, this wood may also contain < 1% of a mold inhibitor and <1% of a non-hazardous wax emulsion. None of these ingredients are classified as carcinogens. ¹Plywood supplied by others is bonded with various low formaldehyde emission bonding systems.

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 contact

Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation 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. If wood splinters are injected under the skin, get medical attention. In case of rashes, wounds or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact

Do not rub eye. Immediately flush eye(s) with plenty of water. Remove any contact lenses and open eyelids wide apart. If eye irritation persists: Get medical advice/attention.

Ingestion

Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Most important symptoms/effects, acute and delayed

May cause allergic skin disorders in sensitive individuals. 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.

Indication of immediate medical attention and special treatment needed

Treat symptomatically. Respiratory ailments and pre-existing skin conditions may be aggravated by exposure to wood dust.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

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

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

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.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions

Use water spray to cool fire exposed surfaces and to protect personnel.

General fire hazards

May form combustible dust concentrations in air.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Avoid generation and spreading of dust. Avoid spread of dust. Avoid inhalation of dust. Provide adequate ventilation. Wear appropriate personal protective equipment (See Section 8).
Methods and materials for containment and cleaning up	Sweep or vacuum up spillage and collect in suitable container for disposal. If not possible, gently moisten dust before it is collected with shovel, broom or the like. Containers must be labeled. For waste disposal, see Section 13 of the SDS.
Environmental precautions	For good industrial practice avoid release to the environment.

7. Handling and storage

Precautions for safe handling	Avoid prolonged or repeated breathing of dust. Avoid prolonged or repeated contact with skin. Wear appropriate personal protective equipment. Do not smoke. Change contaminated clothing. Persons susceptible for allergic reactions should not handle this product. Do not burn preserved wood. Do not use preserved wood as Mulch. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials (See Section 10).

8. Exposure controls/personal protection

Occupational exposure limits

US. -OSHA Components	Type	Value	Form
Wood Dust (CAS N/A)	PEL	5 mg/m ³ 15 mg/m ³	Respirable dust. Total fraction.
ACGIH Components	Type	Value	Form
Wood Dust (CAS N/A)	TWA	1 mg/m ³	Inhalable fraction.
U.S. NIOSH: Pocket Guide to Chemical Hazards			
Components	Type	Value	Form
Copper Carbonate (expressed as elemental copper) (CAS 12069-69-1)	TWA	1 mg/m ³	Dust and mist.
Wood Dust (CAS N/A)	TWA	3 ppm 1 mg/m ³	Dust

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Provide sufficient general/local exhaust ventilation to maintain inhalation exposures below current exposure limits and areas below explosive dust concentrations. Shower, hand and eye washing facilities near the workplace are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields when handling, cutting, sanding or grinding this material. Use a face shield during processes that may generate excessive dusts and splinters.
Skin protection	See Hand Protection
Hand protection	Wear chemical resistant (rubber, neoprene or nitrile) gloves when handling freshly treated wood at the treating plant. Otherwise, wear puncture resistant work gloves, such as leather.
Other	Wear long sleeve shirt, long pants and gloves when working with freshly treated wet wood.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH-approved respirator if there is a potential for exposure to dust exceeding exposure limits (See 29 CFR 1910.134, respiratory protection standard).
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

If wood dust contacts the skin, workers should wash the affected areas with soap and water. Clothing contaminated with wood dust should be removed, and provisions should be made for the safe removal of the chemical from the clothing. Persons laundering the clothes should be informed of the hazardous properties of wood dust. A worker who handles wood dust should thoroughly wash hands, forearms, and face with soap and water before eating, using tobacco products, using toilet facilities, applying cosmetics, or taking medication. Workers should not eat, drink, use tobacco products, apply cosmetics, or take medication in areas where wood dust is handled, or processed. Observe any medical surveillance requirements.

9. Physical and chemical properties**Appearance**

Physical state	Solid.
Form	Solid Wood. Dust.
Color	Not available.
Odor	No odor.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash Point	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Combustible dust.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous reactions do not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Minimize dust generation and accumulation. Avoid contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Reducing agents.
Hazardous decomposition products	Combustion products may yield irritating and toxic vapors/fumes of organic materials, and oxides of carbon and nitrogen.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Wood dust, treated or untreated, is irritating to the nose, throat and lungs. Prolonged or repeated inhalation of wood dusts may cause respiratory irritation, recurrent bronchitis and prolonged colds. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals. Prolonged exposure to wood dusts by inhalation has been reported to be associated with nasal and paranasal cancer.
Skin contact	Handling may cause splinters. Prolonged contact with treated wood and/or treated wood dust, especially when freshly treated at the plant, may cause irritation 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.
Eye contact	Dust may irritate the eyes.
Ingestion	Not likely, due to the form of the product. However, 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.

Symptoms related to the physical, chemical and toxicological characteristics

May cause allergic skin disorders in sensitive individuals. 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.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
Propiconazole (CAS 60207-90-1)		
Acute		
<i>Oral</i>		
LD50	Rat	1517 mg/kg
Tebuconazole (CAS 107534-96-3)		
Acute		
<i>Dermal</i>		
LD50	Rat	> 5000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 2.07 mg/l
<i>Oral</i>		
LD50	Rat	1750 mg/kg

Skin corrosion/irritation Dust may irritate skin.

Serious eye damage/eye irritation Dust may irritate the eyes.

Respiratory or skin sensitization

ACGIH Sensitization

Wood Dust (CAS N/A) Dermal sensitization. Respiratory sensitization.

Respiratory sensitization Exposure to wood dusts can result in hypersensitivity.

Skin sensitization May cause an allergic skin reaction. Exposure to wood dust can result in the development of contact dermatitis. The primary irritant dermatitis resulting from skin contact with wood dusts consist of erythema, blistering, and sometimes erosion and secondary infections occur.

Germ cell mutagenicity No component of this product present at levels greater than or equal to 0.1% is identified as a mutagen by OSHA.

Carcinogenicity May cause cancer by inhalation.
This classification is based on an increased incidence of nasal and paranasal cancers in

IARC Monographs. Overall Evaluation of Carcinogenicity

Wood Dust (CAS N/A) 1 Carcinogenic to humans.

NTP Report on Carcinogens

Wood Dust (CAS N/A)

Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not likely, due to the form of the product.
Chronic effects	Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis.
Further information	Tebuconazole and propiconazole, components of NatureWood-CA Treated Wood, have been classified by EPA as possible human carcinogens. Acute toxicity testing has not been performed on the treated wood.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. This product is not expected to leach harmful amounts of preservative into the environment.

Components	Species	Test Results	
Copper Carbonate (expressed as elemental copper) (CAS 12069-69-1)	EC50	Balanus balanoides	350 - 480 µg/l, 48 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available on bioaccumulation.		
Partition coefficient n-octanol / water (log Kow)			
Propiconazole (CAS 60207-90-1)	3.5		
Mobility in soil	The product is insoluble in water		
Mobility in general	The product is not volatile but may be spread by dust-raising handling.		
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.		

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Do not discharge into drains, water courses or onto the ground.
Local disposal regulations	Dispose in accordance with local regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose in accordance with all applicable regulations. Do not discharge into drains, water courses or onto the ground.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT	Not regulated as dangerous goods.
IATA	Not regulated as dangerous goods.
IMDG	Not regulated as dangerous goods. Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Copper Carbonate (expressed as elemental copper) (CAS 12069-69-1) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Copper Carbonate (expressed as elemental copper)	12069-69-1	< 1
Propiconazole	60207-90-1	< 1

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

Monoethanolamine (MEA) (CAS 141-43-5)

US. New Jersey Worker and Community Right-to-Know Act

Copper Carbonate (expressed as elemental copper) (CAS 12069-69-1)

Propiconazole (CAS 60207-90-1)

Wood Dust (CAS N/A)

US. Pennsylvania Worker and Community Right-to-Know Law

Wood/Wood dust (CAS N/A)

US. Rhode Island RTK

Copper Carbonate (expressed as elemental copper) (CAS 12069-69-1)

Propiconazole (CAS 60207-90-1)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Wood Dust (CAS N/A)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 27-April-2015

Revision date -

Version # 01

Further Information HMIS® is a registered trade and service mark of the NPCA.

E - Safety Glasses, Gloves, Dust Respirator

PERCENTAGE OF ACTIVE INGREDIENTS PER RETENTION LEVEL %:

0.06 pcf

Copper Carbonate expressed as Elemental Copper 0.04-0.06%, Tebuconazole 0.001-0.002%, Propiconazole 0.001-0.002%

0.15 pcf

Carbonate expressed as Elemental Copper 0.10-0.20%, Tebuconazole 0.002-0.004%, Propiconazole 0.002-0.004%

0.31 pcf

Copper Carbonate expressed as Elemental Copper 0.20-0.40%, Tebuconazole 0.004-0.007%, Propiconazole 0.004-0.007%

HMIS® ratings

Health: 1*

Flammability: 1

Physical hazard: 0

Personal protection: E

NFPA ratings



Disclaimer

Universal Forest Products, Inc. and its affiliates cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. However, Universal Forest Products and its affiliates make no warranty with respect and disclaim all liability from reliance on the information.