Safety Data Sheet FOREST PRODUCTS Domestic and imported urea-formaldehyde (UF), scavenged urea-formaldehyde (ULEF) or phenol formaldehyde (PF)

Product ID#

Date of issue: June 1, 2020

(Prepared in accordance with OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 & GHS Rev 03)

SECTION 1: PRODUCT AND COMPANY INFORMATION

Trade Name:	Europly Plus®, CFP 60"s® (on ULEF Composite), Melawood® (on ULEF composite), Classic Core®, Classic Lam [™] , Barkmulch
Product Description:	Domestic and imported urea-formaldehyde (UF), scavenged urea- formaldehyde (ULEF) or phenol formaldehyde (PF) bonded substrates with soy based decorative veneer lamination technology in unfinished or UV (clear, prime, pigment) coated hardwood industrial stock panels with veneer, particleboard or MDF cores, melamine on particleboard, engineered veneer, bark mulch, wood chips
Synonyms:	Hardwood plywood, prefinished plywood, melamine, Russian birch, Baltic birch, bark dust, green wood chips, logs (with and without bark.)
Company:	Columbia Forest Products 7900 McCloud Road, Suite 200 Greensboro, NC 27409 1-800-637-1609
E-mail Address:	www.columbiaforestproducts.com
24 Hour Emergency Pho	one: Contact: Paul Davis, Marketing Communications Manager 503-330-1852

SECTION 2: HAZARD IDENTIFICATION

NOTE: This product may produce hazardous airborne levels of wood dust while being transported or handled by employees or downstream users creating potential hazards as described below:

<u>Classification of the Substance Or Mixture</u> United States (US) Classification according to OSHA 29 CFR 1910.1200 HCS

This product is generally an article but is regulated under OSHA for the release of wood dust during mechanical operations releasing dust. The free formaldehyde levels are below OSHA reporting requirements. The classifications below are based upon wood dust.

Skin Irritation Category 2



Eye Irritation Category 2B Respiratory Sensitization Category 1 Skin Sensitization Category 1 Carcinogen Category 1A Specific Target Organ Toxicity Single Exposure Category 3: Respiratory Tract Irritation

Other Classifications:

Combustible Dust (OSHA Defined Hazard) If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air.

Label elements

Label according to OSHA HCS 2012

Hazard pictograms



Signal word: Hazard statements:	Danger Causes skin irritation Causes eye irritation May cause allergy or asthma symptoms or breathing difficulties if inhaled May cause an allergic skin reaction May cause cancer via inhalation of respirable dust May cause respiratory irritation May form combustible dust concentrations in air
Precautionary statements	
Prevention:	Take precautionary measures against static discharge.Avoid breathing dust.Take off contaminated clothing and wash before reuse.In case of inadequate ventilation wear an approved respirator suitable for conditions of use.Do not eat, drink or smoke when manufacturing or installing this product.
Response:	IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.



	If experiencing respiratory symptoms, following removal to fresh
	air, call a Doctor or other qualified medical professional.
	IF ON SKIN: Wash with plenty of soap and water.
	If skin irritation or rash occurs get medical advice/attention.
	If In Eyes: Rinse cautiously for several minutes. Remove contact
	lenses if present and easy to do so.
	If eye irritation persists, get medical advice.
Storage:	Store away from incompatible materials.
Disposal:	Dispose of waste and residues in accordance with local authority
-	requirements.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures: This product may produce hazardous airborne levels of wood dust and formaldehyde gas while being handled by downstream users creating potential hazards as described below:

Component	CAS No.	Weight %	Hazard Classification According to Regulation
Wood Dust	Not listed RTECS #: ZC9850000	~ 98%	EU CLP: Self Classified: Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A OSHA HCS 2012 : Skin Irrit 2; Eye Irrit 2; Skin Sens 1; Resp Sens 1; STOT SE 3 (Resp Irrit), Carc 1A
Formaldehyde	50-00-0	< 0.1% (emitted in small and diminishing quantities from Urea Formaldehyde resin glue)	EU CLP: Harmonised Classification: Acute Tox 3 (Oral, dermal and inhalation); Skin Corr 1B; Skin Sens 1; Carc1B; Muta 2 OSHA HCS 2012: Acute Tox 3 (Oral, dermal and inhalation); Skin Corr 1B; Skin Sens 1; Carc 2

SECTION 4: FIRST AID MEASURES

Eye Contact: In case of eye contact, immediately rinse eyes thoroughly with plenty of water. If wearing contact lenses, remove only after initial rinse, and continue rinsing eyes for at least 15 minutes. If irritation occurs or persists, consult a physician.

Skin Contact: In case of skin contact, while wearing protective gloves, carefully remove any contaminated clothing, including shoes, and wash skin thoroughly with soap and water. If irritation or symptoms occur or persist, consult a physician.



Inhalation: Remove to fresh air. If any trouble breathing, get immediate medical attention. Administer artificial respiration if breathing has ceased. If irritation or symptoms occur or persist, consult a physician.

- **Ingestion:** Not applicable under normal use.
- **Notes for the Doctor:** Any treatment that might be required for overexposure should be directed at the control of symptoms and the clinical conditions.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Carbon dioxide (CO ₂), water and sand.
Unsuitable Extinguishing Media:	Heavy water (or jet) stream may cause dust to become airborne and create a flash fire hazard or an explosive atmosphere.
Firefighting Procedures:	Follow established procedures for extinguishing wood source fire.
Unusual Fire and Explosion Hazard:	Hardwood plywood does not present an explosion hazard Sawing, sanding, or machining of hardwood plywood can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 grams of wood dust per cubic meter of air is often used as the LEL for wood dust. OSHA interprets the explosive level as having no visibility within 5 feet or less.
Hazardous Combustion: Products:	Burning of Hardwood plywood can result in carbon monoxide, carbon monoxide, hydrogen cyanide, aldehydes, organic acids, and polynuclear aromatic compounds.
Further Information:	Flash point: 600°F for wood. Auto- ignition temp.: Varies (typically 400°F to 500°F (204°-260°C) Explosive limits in air: N/A for hardwood plywood. 40 g/m ³ (LEL) for wood dust.
NFPA Rating (Scale 0-4): Health	h = 2 Fire = 1 Reactivity = 0



Evacuate personnel to safe areas. Remove all sources of **Emergency Procedures:** ignition. Take precautionary measures against static discharges and against environmental release. **Personal Precautions and** Pick up, vacuum, or sweep spills for recovery and/or **Protective Equipment:** disposal. Avoid generation of dust during clean-up. Wear goggles or safety glasses when manufacturing or machining any wood product. Wear NIOSH/MSHA approved respirator when the allowable limits may be exceeded. Other protective equipment, such as gloves and outer garments may be needed, depending on dust conditions. **Environmental Precautions:** Do not allow product to reach ground water, water courses, sewage, or drainage systems during clean-up. Methods and Materials for All spills should be handled according to site requirements and based on precautions cited in the SDS. In the case of **Containment and Clean-up:** liquids, use proper absorbent materials. For laboratories and small-scale operations, incidental spills within a hood or enclosure should be cleaned by using a HEPA filtered vacuum or wet cleaning methods as appropriate. For large dry or liquid spills or those spills outside enclosure or hood, appropriate emergency response personnel should be notified. In manufacturing and large-scale operations, HEPA vacuuming prior to wet mopping or cleaning is required. See Sections 9 and 10 for additional physical, chemical, and hazard information. **Other Information:** No further information is available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling:	No special precautions for handling product. Use good safety and industrial hygiene practices. Avoid creating dusty conditions. Provide good ventilation where dust conditions cannot be avoided during cleanup. Place recovered wood dust in a container for proper disposal.
Conditions for Safe Storage:	Store in well ventilated area as product will emit small amounts of formaldehyde. Keep away from sources of ignition as dried wood dust may pose a combustible dust hazard.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Guideline:

Exposure Limits:

Component	CAS No.	Agency	Exposure Limits
Wood Dust (all soft and hard woods)	Not listed	OSHA	PEL-TWA 15 mg/m ³ (total dust)
	RTECS #: ZC9850000	OSHA	PEL-TWA 5 mg/m ³ (respirable dust)
		OSHA	PEL-TWA 5 mg/m ³ (recommended softwood and hardwood; see footnote ¹ below)
		OSHA	STEL 10 mg/ mg/m ³ (recommended softwood and hardwood; ; see footnote below)
		ACGIH	TLV-TWA 1 mg/m ³ (certain hardwoods);
		ACGIH	TLV-TWA 5 mg/m ³ (softwood)
		ACGIH	TLV-STEL 10 mg/m ³
Formaldehyde	50-00-0	OSHA	TWA 0.75 ppm; STEL 2 ppm
		ACGIH	STEL 0.3 ppm
		HUD	0.3 ppm at .13 ft ² /ft ³

Engineering Controls:

Provide adequate ventilation and exhaust to keep airborne contaminant concentration levels below the OSHA PELs, and to reduce the possible buildup of formaldehyde gas, particularly when high temperatures and relative humidity

¹ In AFL-CIO v. OSHA 965 F. 2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. The 1989 PELs were: TWA - 5 mg/m³; STEL (15 min.) - 10.0 mg/m³(all soft and hard woods except Western red cedar); Western red cedar TWA-2.5 mg/m³. Wood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or Inert or Nuisance Dust categories at PELs noted under PART II of this MSDS. However, a number of states have incorporated provisions of the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSH Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 PELs.V1.2.



occur. Avoid dusty conditions, and observe same ventilation for wood dust as indicated for formaldehyde.
Wear goggles or safety glasses when manufacturing or machining any wood product.
Wear protective gloves such as rubberized cloth, canvas or leather gloves to minimize potential mechanical irritation from handling materials. Outer garments which cover the arms may be desirable in extremely dusty areas.
Wear NIOSH/MSHA approved dust respirator when the allowable limits may be exceeded.
Prevent/avoid creating/breathing dust. Wash after handling. Do not eat, drink, or smoke while manufacturing or installing this product.

Environmental Exposure Control: No data available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance		
Physical Description:	Unfinished and UV Finished multi-ply composite wood panels consisting of various combinations of hardwood or decorative veneer faces, bonded to other wood veneers, particleboard, medium density fiberboard, lumber, or hardboard. Generally used in cabinets, furnishings, laminated block flooring, and in other non-structural applications. Typically provided as 4' X 8' panels, but available in other sizes. Thicknesses range from under 5/32" to over 1".	
Appearance/Odor:		atural wood. Light to dark in color. Color and species and expired time since processing.
Safety Relevant Basic Data		
pН		Not applicable
Melting point/freezing point		Not applicable
Initial boiling point and boiling range		Not applicable
Auto- ignition temp.		Varies (typically 400°F to 500°F (204°-260° C)
Explosive limits in air:		N/A for hardwood plywood. 40 g/m ³ (LEL) for wood dust.



Flash point	600°F for wood.
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Not applicable
Specific gravity	Usually less than 1, but varies depending on
	wood species and moisture content.
Solubility(ies)	Insoluble.
Partition coefficient: n-octanol/water	Not applicable
Viscosity	Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable at normal temperature and storages condition.
Conditions to avoid:	High temperatures and high relative humidity increase the rate of formaldehyde emissions. Avoid open flames or other ignition source.
Incompatible materials:	Oxidizing agents and drying oils.
Hazardous decomposition products:	Thermal and/or thermal oxidative decomposition of wood can produce irritating and toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes, organic acids, and polynuclear aromatic compounds.
Hazardous polymerization:	Will not occur.
Sensitivity to static discharge:	May cause explosion in critical concentrations and conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological data have not been determined specifically for this product. Individual component information is listed below.

The information below may not be consistent with the material classification in Section 2 because formaldehyde is presented below the threshold for labelling (0.1%).

Acute Effects:



Formaldehyde: Oral LD_{50} : Dermal LD_{50} : > Inhalation 4h LC_{50} :	100 mg/kg (rat) 270 mg/kg (rabbit) >203 mg/m ³ (rat)		
Wood dust:	No data available.		
Eye Irritation:	Gaseous formaldehyde may cause temporary irritation or a burning		
Skin Irritation:	sensation. Wood dust can cause mechanical irritation. Depending on species, wood dust may cause dermatitis on prolonged, repetitive contact. Formaldehyde is corrosive and contact can severely irritate the burn the skin and eyes with possible eye damage.		
Respiratory Irritation:	Wood dust and/or formaldehyde may cause nasal dryness and/or irritation. Coughing, sneezing, wheezing, sinusitis, prolonged colds, and headaches have also been reported. Both may aggravate pre-existing respiratory conditions or allergies. Wood dust may also cause nasal obstruction.		
Respiratory Sensitization:	Formaldehyde and/or wood dust may cause respiratory sensitization and/or irritation. Pre-existing respiratory disorders may be aggravated by exposure.		
Skin Sensitization:	Both formaldehyde and wood dust from various species of wood may evoke allergic contact dermatitis in sensitized individuals		
Carcinogenicity:	Prolonged exposure to wood dust has been reported by some observers of European furniture workers to be associated with nasal cancer. IARC classifies wood dust as a carcinogen to humans (Group 1). This 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 exposure to wood dust. IARC did not find sufficient evidence to associate cancers of the oropharynx, lung, lymphatic, and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust. The National Toxicology Program (NTP) has also listed wood dust as a known human carcinogen. Wood dust is not listed as a carcinogen by ACGIH or OSHA. A large case control nasal cancer mortality study in North Carolina, Mississippi, Washington and Oregon (1962-1977) did not demonstrate an associated with wood dust.		
	Formaldehyde is listed by IARC as a human carcinogen. NTP includes formaldehyde in the Annual Report on Carcinogens. Formaldehyde is regulated by OSHA as a potential cancer agent. Some rats exposed under laboratory conditions to 14 ppm		



	formaldehyde (a level far exceeding human tolerance limits, and far exceeding that normally found in the workplace) for two years developed a nasal cancer. The Universities Associated for Research and Education in Pathology (UAREP) has stated in a report, Epidemiology of a Chronic Occupational Exposure to Formaldehyde, (December, 1987) that: "1: For no malignancy in man is there convincing evidence of a relationship with formaldehyde exposure; and 2: Furthermore, that if a relationship does exist, the excess risk, in absolute terms, must be small."
Mutagenicity:	No data available for wood dust. Formaldehyde is classified to GHS Category 2 for mutagenicity endpoint based on induction of genotoxic and mutagenic effects on somatic cells at the site of contact.
Reproductive Effects:	No data available for wood dust. Formaldehyde is not classified to GHS for reproductive toxicity.
Specific Target Organ Toxicity Single Exposure:	May cause respiratory irritation.
Specific Target Organ Toxicity Repeated Exposu	May cause damage to organs (respiratory system) through prolonged exposure
Target Organs: Routes of Exposure:	Eyes, skin, respiratory system. Inhalation, dermal, eye.

Signs and Symptoms of Exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. The ecological assessment of this material is based on an evaluation of its components.

Ecotoxicity (Aquatic and Terrestrial):	No data available for wood dust. Wood dust may contain ingredients that are considered hazardous to aquatic organism. Formaldehyde is not considered
Persistence/Degradability:	to be toxic to aquatic organisms. Wood dust would be expected to be biodegradable. Formaldehyde is expected to be readily biodegradable in the environment based on
	experimental data.



Bioaccumulation/Accumulation:

No data available for wood dust. Formaldehyde has a low potential for bioaccumulation.

Mobility in Soil: Results of PBT and vPvB Assessment: Other Adverse Effects: No data available. No data available. No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods:	Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations. Incineration is the preferred method of disposal, when appropriate. Disposal is the responsibility of the generator.
Contaminated Packaging:	Disposal must be in accordance with applicable federal, state/provincial, and/or local regulations.

SECTION 14: TRANSPORT INFORMATION

This material is not regulated for transportation when it is shipped without mixture with other hazardous components. This classification is based on the evaluation of available information until full testing is completed or additional information is available to further classify hazards for transportation. Therefore, the use of PG I UN-specification packaging is recommended to ensure safe transportation of this material.

US DOT (Ground)	No data available
Proper Shipping Description:	No data available
Canadian TDG (Ground)	No data available
Proper Shipping Description:	No data available
ICAO (Air)	No data available
Proper Shipping Description:	No data available
IMDG (Water)	No data available
Proper Shipping Description:	No data available

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

United States

Formaldehyde (50-00-0)		
Listed on the United States TSCA (Toxic Substance Control Act) inventory		
Listed on SARA Section 313 (Specific toxic chemical list	ting)	
RQ (Reportable quantity, section 304 of EPA's list of lists)	100 lb	
SARA Section 311/312 Hazard Class	Immediate (acute) health hazard Delayed (chronic) health hazard	
SARA Section 313-Emission Reporting	0.1%	
TPQ (Section 302)	500 lb	
OSHA	1000 Ib (TQ)	
Wood dust (CAS# NA)		
Listed on SARA Section 313 (Specific toxic chemical listing)		
SARA Section 311/312 Hazard Class	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard	
OSHA	Wood products are not hazardous under the criteria of the federal OSHA Hazard communication Standard 29 CFR 1910.1200. However wood dust generated by sawing, sanding or machining activities may be considered hazardous.	

United States - California

Formaldehyde (50-00-0)		
U.S. – California – Proposition 65 – Carcinogens List	Yes.	
No significance risk level (NSRL)	40 µg/day	
This product contains formaldehyde, which depending on temperature and humidity, may be omitted from the product. The user should determine whether formaldehyde emission resulting from its site specific use, handling, ventilation design and capacity for this products could exceed the safe harbor levels (40 µg/day). Wood dust (CAS# NA)		
U.S. – California – Proposition 65 – Carcinogens List	Yes.	
Drilling, sawing, sanding or machining wood products generates 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. California Health and Safety Code Section 25249.6.		

Canada

Formaldehyde (50-00-0)

Listed on the Canadian DSL (Domestic Substances List) inventory

WHMIS Classification Wood dust (CAS# NA)	Class D Division 1 Subdivision A – Very toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A – Very toxic material causing other toxic effects Class E – Corrosive Material
Listed on the Canadian DSL (Domestic Substances List) inventory	
WHMIS Classification	Controlled Product: D2A – Wood dust: IARC Group 1

SECTION 16: OTHER INFORMATION

Disclaimer	This document has been prepared based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. User is responsible to evaluate all available information when using product for any particular use and to comply with all laws and regulations.
Preparation Date :	September 8, 2015
Revision Date :	N/A

Glossary:

ACGIH - American Conference of Governmental Industrial Hygienists

Carc - Carcinogenic

CAS - Chemical Abstract Service

CLP – The Classification, Labelling and Packaging Regulation

DOT - Department of Transportation

EPA = U.S. Environmental Protection Agency

Eye Irrit - Eye Irritation

GHS - Globally Harmonized System

HEPA - High Efficiency Particulate Arresting

HUD - The US Department of Housing and Urban Development

IARC - International Agency for Research on Cancer, IARC Group 1 or 2A

LD50 - Lethal Dose, 50% for oral and dermal

LC50 - Lethal Concentration, 50% for inhalation

NA – Not Available

NTP - National Toxicology Program

OSHA – Occupational Safety and Health Administration

PBT - Persistent Bioaccumulative Toxic

PEL – Permissible Exposure Limit

PG - Packing Group

PPE - Personal Protective Equipment



Resp Sens – Respiratory Sensitization SARA – Superfund Amendments and Reauthorization Act Skin Irrit - Skin Irritation Skin Sens – Skin Sensitization STEL – Short-Term Exposure Limit (15 minutes) STOT - Specific Target Organ Toxicity TLV – Threshold Limit Value TPQ – Threshold Planning Quantity TSCA - Toxic Substances Control Act TWA - Time Weighted Average UN - United Nations vPvB - Very Persistent and Very Bioaccumulative WHMIS - (Canada) Workplace Hazardous Materials Information System