

# Safety Data Sheet (SDS)



## Parallam<sup>®</sup> Plus PSL (CCA)

### 1. Identification

TRADE NAME(S):	Parallam <sup>®</sup> Plus PSL (CCA)
SYNONYMS and/or GRADES:	CCA Treated Parallel Strand Lumber, CCA Treated Wood, CCA Treated Structural Composite Lumber, Wolmanized <sup>®</sup> Parallam <sup>®</sup> PSL (CCA)
PRODUCT USES:	Building Materials
CHEMICAL NAME/CLASS:	Wood Products
MANUFACTURER'S NAME:	Weyerhaeuser
ADDRESS:	220 Occidental Ave S., Seattle, WA 98104
EMERGENCY PHONE (DOT):	(844) 523-4081 (3E Company)
BUSINESS PHONE:	(206) 539-3910
INTERNET ACCESS:	See section 16
REVISED DATE:	September 13, 2016

### 2. Hazard(s) Identification

Signal Word: **DANGER**

Classification	Hazard Statement(s)	Pictogram(s)
HEALTH Carcinogen - Category 1A (H350)*	Wood dusts may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses by inhalation	
Skin Sensitization Category 1B  Skin Irritation Category 2 (H315)  Specific Target Organ Toxicity - Single Exposure (STOT) Category 3 (H335)	May cause an allergic skin reaction  May cause skin irritation  May cause respiratory irritation	

## 2. Hazard Identification(s) (cont'd.)

Eye Irritation Category 2B (H320)	Causes eye irritation	None
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	None

\*Hazard codes (GHS)

**HMIS Rating (Scale 0-4):** Health = 2\* Fire = 1 Physical Hazard = 0  
**NFPA Rating (Scale 0-4):** Health = 1 Fire = 1 Reactivity = 0

### Precautionary Statement(s):

#### Prevention Statements:

- P210: Keep away from sparks, flame or other heat sources.
- P243: Take precautionary measures against static discharge.
- P260 and P261: Avoid breathing dust.
- P270: Do not eat, drink or smoke when using this product.
- P280: Wear appropriate protective equipment for skin exposure. In case of inadequate ventilation wear an approved respirator suitable for conditions of use.
- P333 and P313: If skin irritation or rash occurs, get medical advice or attention.
- P362 and P363: Take off contaminated clothing and wash before reuse.

#### Response Statements:

- P304 and P340: If inhaled and breathing becomes difficult, remove person to fresh air and keep comfortable for breathing.
- P308 and P313: If experiencing respiratory symptoms, following removal to fresh air, call a doctor or other qualified medical professional.
- P313: If skin irritation or rash occurs, get medical advice or attention.
- P362: Wash contaminated clothing before reuse.
- P352 and P264: If on skin, wash with plenty of soap and water.
- P338 and P351: If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do so.

#### Disposal:

- P501: Dispose of in accordance with federal, state and local regulations.

**Ingredients of Unknown Acute Toxicity (>1%):** NAP

## 3. Composition/Information on Ingredients

Ingredients	CAS#	Wt. %
Wood (wood dust, softwood or hardwood)	None	85-91
Phenol-formaldehyde resin	9003-35-4	6-7
Chromium (III) <sup>A</sup> (Cr <sub>2</sub> O <sub>3</sub> )	1308-38-9	1-3

### 3. Composition/Information on Ingredients (cont'd.)

Arsenic (V) Oxide <sup>A</sup> (As <sub>2</sub> O <sub>5</sub> )	1303-28-2	1-3
Copper Oxide <sup>A</sup> (CuO)	1317-39-1	1-3

Notes: Chromic acid, arsenic acid, and copper oxide are present in the preservative used to treat this wood but once fixed in the wood the chemicals form a complex. Actual retention may vary due to differences in wood stock and treatment retention levels.

<sup>A</sup> Concentrations noted are based on wood retention of 0.6 pounds CCA per cubic foot of wood. Actual retention percentage may vary slightly due to differences in wood stock and treatment retention levels. The chemical form of CCA present in the treated wood product is variable due to chemical reactions between the preservative solution and the wood cellulose during the process commonly referred to as fixation which changes the chemical structure. Therefore, the CAS numbers provided are for majority component metals anticipated.

### 4. First Aid Measures

**Inhalation:** Treated wood dust may cause unpleasant obstruction in the nasal passages, resulting in dryness of nose, dry cough and sneezing. Remove to fresh air. Seek medical help if persistent irritation, severe coughing or breathing difficulty occurs

**Eye Contact:** Treat dust in eye as a foreign object. Flush with water to remove dust particles. Remove contact lenses if present and easy to do so. Avoid touching or rubbing eyes to avoid further irritation or injury. Seek medical help if irritation persists.

**Skin Contact:** Treated wood dust containing chromium can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Wash exposed areas with mild soap to remove dust and seek medical help if rash, irritation or dermatitis persists. Clothing should be laundered regularly.

**Skin Absorption:** Not known to be absorbed through the skin.

**Ingestion:** Not applicable under normal use. Wash hands thoroughly before eating, drinking or using tobacco products after handling materials.

#### **Symptoms or Effects:**

Acute Symptoms/Effects – Treated wood dust may cause mechanical and/or chemical irritation of the respiratory system. Wood dust can cause physical obstructions in the nasal passages, resulting in dryness of nose, dry cough, and sneezing. Wood dust may cause mechanical irritation of the eyes. Treatment chemicals (particularly when wet from treatment) may cause temporary irritation of skin, eyes, or respiratory system. Treated wood dust containing Chromium VI can elicit allergic contact dermatitis in sensitized individuals causing an exaggerated skin response including dryness, redness, cracking, blistering and inflammation.

Delayed Symptoms/Effects - – Skin reactions from Chromium VI allergic contact dermatitis in sensitized individuals may develop hours or days after exposure. Unique delayed effects for other components are not anticipated after exposure. See Section 11 for additional information on chronic effects.

### 5. Fire-fighting Measures

**Extinguishing Media and Restrictions:** Water, carbon dioxide, sand.

**Specific Hazards, Anticipated Combustion Products:** Thermal decomposition (i.e. smoldering, burning) products include carbon monoxide, carbon dioxide, aliphatic aldehydes including formaldehyde, resin acids, terpenes, polycyclic aromatic hydrocarbons, oxides of nitrogen, chromium, copper, and arsenic. The metals may remain in the ash if the wood is burned. Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Spontaneous and rapid hazardous decomposition will not occur.

**Auto-ignition Temperature:** Variable [typically 400°-500°F (204°-260°C)].

## 5. Fire-fighting Measures (cont'd.)

**Special Firefighting Equipment/Procedures:** Use SCBA and complete turn-out gear while fighting fire.

**Unusual Fire and Explosion Hazards:** Depending on moisture content and more importantly, particle diameter and airborne concentration, treated wood and resin dust 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 and the NFPA *Fire Protection Handbook* for guidance. Ventilation systems should be kept clean and precautions should be taken to prevent sparks or other ignition sources.

## 6. Accidental Release Measures

**Steps to be taken in case Material Is Released or Spilled:** Sweep or vacuum up for recovery and disposal. Avoid creating dusty conditions whenever feasible. Maintain good housekeeping to avoid accumulation of wood and resin dust on exposed surfaces. Use approved filtering face piece respirator ("dust mask") or higher levels of respiratory protection as indicated and goggles where ventilation is not possible and exposure limits may be exceeded or for additional worker comfort. Avoid skin contact with dusts from either direct contact and/or settled airborne dust and use good personal hygiene such as washing exposed skin surfaces with soap and water.

## 7. Handling and Storage

**Precautions to be taken in Handling and Storage:** Dried wood and resin dust may pose a combustible dust hazard. Keep away from ignition sources. Avoid prolonged or repeated contact with skin. These products may release some formaldehyde in gaseous form. Specific handling and storage conditions should be assessed to determine potential formaldehyde concentrations. Avoid repeated or prolonged breathing of treated or untreated wood dust. Use an approved filtering face piece respirator ("dust mask") if dust is generated during handling. Avoid skin contact with dusts from either direct contact and/or settled airborne dust and use good personal hygiene such as washing exposed skin surfaces with soap and water. Store in well-ventilated, cool, dry place away from open flame.

## 8. Exposure Control Measures/Personal Protection

### Exposure Limits/Guidelines:

Ingredient(s)	Agency	Exposure Limit(s)	Comments
Wood (wood dust, softwood and hardwood)	OSHA	PEL-TWA 15 mg/m <sup>3</sup> (see footnote <sup>A</sup> below)	Total dust (PNOR)
	OSHA	PEL-TWA 5 mg/m <sup>3</sup> (see footnote <sup>A</sup> below)	Respirable dust fraction (PNOR)
	ACGIH	TLV-TWA 1 mg/m <sup>3</sup>	Inhalable fraction
Phenol-formaldehyde resin <sup>B</sup>	OSHA	PEL-TWA 0.75 ppm	Free gaseous formaldehyde
	OSHA	PEL-STEL 2 ppm	
	ACGIH	TLV- (C) 0.3 ppm	Ceiling limit - formaldehyde
Chromium (III) <sup>C</sup>	OSHA	PEL-TWA 0.5 mg/m <sup>3</sup>	As chromium
	ACGIH	TLV-TWA 0.5 mg/m <sup>3</sup>	As chromium
	ACGIH	TLV-TWA 0.01 mg/m <sup>3</sup>	As chromium- insoluble

## 8. Exposure Control Measures/Personal Protection (cont'd.)

Arsenic (V)	OSHA ACGIH	PEL-TWA 0.01 mg/m <sup>3</sup> TLV-TWA 0.01 mg/m <sup>3</sup>	As arsenic As arsenic
Copper	OSHA ACGIH	PEL-TWA 1 mg/m <sup>3</sup> TLV-TWA 1 mg/m <sup>3</sup>	Dusts and mist Dusts and mist

<sup>A</sup> In *AFL-CIO v OSHA*, 965 F. 2d 962 (11th Cir. 1992), the Court overturned OSHA's 1989 Air Contaminants Rule, including the specific PEL's for wood dust that OSHA had established at that time. The 1989 vacated PEL's were: 5 mg/m<sup>3</sup> PEL-TWA and 10 mg/m<sup>3</sup> STEL (15 min), all softwood and hardwood except Western Red Cedar. Wood dust is now regulated by OSHA as "Particulates Not Otherwise Regulated" (PNOR), which is also referred to as "nuisance dust". However, some states have regulated wood dust PEL's in their state plans. Additionally, OSHA indicated that it may cite employers under the OSH Act general duty clause in appropriate circumstances.

<sup>B</sup> These products may contain free formaldehyde (<0.1%, wt. %), which may be released depending on concentration and environmental conditions. These products do not contain added urea-formaldehyde resins. Large scale chamber studies conducted by the APA Engineered Wood Association on products using similar manufacturing processes and formaldehyde adhesives as Parallax<sup>®</sup> Plus PSL (CCA) have shown that the finished products should off-gas levels below 0.1 ppm as well.

<sup>C</sup> Although Chromium VI is the original valence in the chromic acid used to treat this wood, it is reduced to Chromium III during the treating and fixation process. Some Chromium VI may remain in trace amounts (<0.1%, wt. %). Under usual handling conditions Cr VI and Cr III levels are anticipated to be below the established action levels and or exposure limits. If unusual circumstances exist, personal air monitoring may be required to assure compliance with OSHA's Hexavalent Chromium Standard (29CFR 1910.1026).

### Ventilation:

**LOCAL EXHAUST** – Provide local exhaust as needed so that exposure limits are met. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of wood dust within the system. See "SPECIAL" section below. Use of tool mounted exhaust systems should also be considered, especially when working in enclosed areas.

**MECHANICAL (GENERAL)** – Provide general ventilation in processing and storage areas so that exposure limits are met.

**SPECIAL** – Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.

**OTHER ENGINEERING CONTROLS** – Cutting and machining of product should preferably be done outdoors or with adequate ventilation and containment.

### Personal Protective Equipment:

**RESPIRATORY PROTECTION** – Use NIOSH approved filtering face piece respirator ("dust mask") or higher levels of respiratory protection as indicated if there is a potential to exceed the exposure limits of any of the constituents (e.g., arsenic) or for symptom relief or worker comfort. Use respiratory protection in accordance with regulatory requirements such as the OSHA respiratory protection standard 29 CFR 1910.134 following a determination of risk from exposures.

**EYE PROTECTION** – Approved goggles or tight fitting safety glasses are recommended when excessive exposures to dust may occur (e.g. during clean up) and when eye irritation may occur.

**PROTECTIVE GLOVES** – Leather gloves are recommended to minimize potential mechanical irritation from handling dry product. Rubber, neoprene or coated vinyl gloves are recommended when handling wet product.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT** – Outer garments may be desirable in extremely dusty areas. If preservatives and/or wood dust accumulate on clothes, launder before reuse. Wash work clothes separately from other household clothing.

## 8. Exposure Control Measures/Personal Protection (cont'd.)

WORK/HYGIENE PRACTICES – Follow good hygienic and housekeeping practices.

Note: Avoid skin exposures from either direct contact and/or settled airborne dust. It is very important to wash hands promptly following exposures to assure that sensitization to the skin does not occur.

Clean up areas where treated wood dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

## 9. Physical/Chemical Properties

**Appearance:** Parallam® Plus PSL (CCA) is green in color consisting of southern yellow pine softwood with a woody odor.

<b>Odor/Odor Threshold(s):</b>	NAV
<b>pH:</b>	NAP
<b>Melting/Freezing Point:</b>	NAP
<b>Boiling Point (@ 760 mm Hg) and Range:</b>	NAP
<b>Flash Point:</b>	NAP
<b>Evaporation Rate:</b>	NAP
<b>Flammability:</b>	NAP
<b>Lower/Upper Explosive Limits:</b>	40,000 mg of dust per cubic meter of air is often used as the LEL for wood dusts.
<b>Vapor Pressure (mm Hg):</b>	NAP
<b>Vapor Density (air = 1; 1 atm):</b>	NAP
<b>Relative Density:</b>	NAP
<b>Solubility:</b>	Insoluble
<b>Partition Coefficient (n-octonal/water):</b>	NAP
<b>Autoignition Temperature:</b>	Variable [typically 400°-500°F (204°-260°C)]
<b>Decomposition Temperature:</b>	NAV
<b>Viscosity:</b>	NAP
<b>Other Properties:</b>	NAP

## 10. Stability and Reactivity

**Reactivity:** NAP

**Hazardous Polymerization:**  May occur  Will not occur

**Stability:**  Unstable  Stable

**Conditions to Avoid:** Avoid open flame. Product may ignite at temperatures in excess of 400°F (204°C).

**Incompatibility (Materials to Avoid):** Avoid contact with oxidizing agents and drying oils.

**Hazardous Decomposition or By-Products:** Thermal decomposition (i.e. smoldering, burning) products include carbon monoxide, carbon dioxide, aliphatic aldehydes including formaldehyde, resin acids, terpenes, polycyclic aromatic hydrocarbons, oxides of nitrogen, chromium, copper, and arsenic. The metals may remain in the ash if the wood is burned. Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Spontaneous and rapid hazardous decomposition will not occur.

**Sensitivity to Static Discharge:** Airborne wood dust may be ignited by a static discharge depending on airborne concentrations, particle size and moisture content.

## 11. Toxicological Information

### Likely Route(s) of Exposure:

- Ingestion:
- Skin:
- Inhalation:
- Eye:

### Signs and Symptoms of Exposure:

**Wood Dust - NTP** – According to its Report on Carcinogens, Thirteenth Edition, NTP states, “Wood dust is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans”. An association between wood dust exposure and cancer of the nasal cavity has been observed in many case reports, cohort studies, and case-control studies that specifically addressed nasal cancer. Associations with cancer of the nasal cavities and paranasal sinuses were observed both in studies of people whose occupations are associated with wood dust exposure and in studies that directly estimated wood dust exposure. This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust. There is inadequate evidence for the carcinogenicity of wood dust from studies in experimental animals according to NTP

**Wood Dust: IARC – Group 1:** Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma to the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum.

**Formaldehyde – NTP:** According to its Report on Carcinogens, Thirteenth Edition, NTP states, Formaldehyde (gas) is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans and supporting data on mechanisms of carcinogenesis.

**Formaldehyde: IARC – Group 1:** Carcinogenic to humans, sufficient evidence of carcinogenicity. A working group of IARC has determined that there is sufficient evidence that formaldehyde causes nasopharyngeal cancer in humans, a rare cancer in developed countries and “strong but not sufficient evidence” for leukemia. However, numerous epidemiological studies have failed to demonstrate a relationship between formaldehyde exposure and nasal cancer or pulmonary diseases such as emphysema or lung cancer.

**Arsenic (as Arsenic Compounds, inorganic) – NTP:** According to its Thirteenth Report on Carcinogens, NTP states, “Inorganic arsenic compounds are *known to be human carcinogens* based on sufficient evidence of carcinogenicity in humans (IARC 1987). Many cases of skin cancer have been reported among people exposed to arsenic through medical treatment with inorganic trivalent arsenic compounds. In some instances, skin cancers have occurred in combination with other cancers, such as liver angiosarcoma, intestinal and urinary bladder cancers, and meningioma. Epidemiological studies of cancer after medical treatment with arsenic compounds have shown an excess of skin cancers, but no clear association with other cancers has been obtained.”

**Arsenic (and arsenic compounds): IARC - Group 1:** (Carcinogenic to humans; sufficient evidence of carcinogenicity). This evaluation applies to arsenic and arsenic compounds as a whole and not necessarily to all individual chemicals within the group. *Arsenic pentoxide, the arsenic compound used in the product, has not been associated with carcinogenicity.*

**Chromium (VI): IARC - Group 1:** Carcinogen (Carcinogenic to humans; sufficient evidence of carcinogenicity).

## 11. Toxicological Information (cont'd.)

**Carcinogenicity Listing(s):** Note: IARC, the NTP, OSHA and California Proposition 65 do not consistently distinguish among arsenic or chrome species but list inorganic arsenic and chromium and certain chromium compounds as human carcinogens.

- NTP: Wood dust; Arsenic (as Arsenic Compounds, inorganic) and Chromium (VI) compounds - Classified as Known Human Carcinogens. Formaldehyde is reasonably anticipated to cause cancer in humans.
- IARC Monographs: Wood dust; Arsenic (and arsenic compounds); Formaldehyde and Chromium (VI): Group I compounds - Carcinogenic to humans.
- OSHA Regulated: Arsenic compounds (29CFR 1910.1018); Chromium (VI) (29CFR 1910.1026); Formaldehyde (29CFR 1910.1048).

**Toxicity Data:** No specific information available for product in purchased form. Individual component information is listed below.

### **Components:**

#### Wood dust (softwood or hardwood)

Treated wood dust generated from sawing, sanding or machining the product may cause nasal dryness, irritation, coughing and sinusitis. NTP and IARC classify wood dust as a human carcinogen (IARC Group 1).

#### Formaldehyde

Human inhalation  $TC_{Lo}$  of 17 mg/m<sup>3</sup> for 30 minutes produced eye (lacrimation) and lung/thorax and respiration (other changes); human inhalation  $TC_{Lo}$  of 300 ug/m<sup>3</sup> produced nose and central nervous system changes;  $LC_{50}$  (rat, inhalation) = 1,000 mg/m<sup>3</sup>, 30 minutes;  $LC_{50}$  (mice, inhalation) = 400 mg/m<sup>3</sup>, 2 hours. IARC classifies formaldehyde as a human carcinogen (IARC Group 1). NTP classifies formaldehyde as Reasonably Anticipated to be a Human Carcinogen. See Section 3 above.

#### Chromated copper arsenate (CCA)

Sawdust from CCA treated wood has been shown not to cause changes in mice fed sawdust or birth defects in mice or rabbits receiving sawdust in their feed or applied to their skin. Recreational exposure to children using CCA treated wood playground equipment has been evaluated. The results of this study indicate that the amount of arsenic transferred from the wood surface to the child is within the normal variation of total arsenic exposure to children and that the maximum risks of skin cancer associated with exposure approximates the skin cancer risk from sunlight exposure experienced during normal play periods.

**Target Organs:** Eyes, skin and respiratory system.

**Note:** Weyerhaeuser evaluated the studies referenced in the ACGIH® TLV® Documentation for Wood Dust and others which included potential allergenic references for wood species which may cause skin or respiratory sensitization. There are a limited number of studies of highly variable consistency which reference sensitization from some species of wood. When weighing the total evidence, the wood dust from this product is considered to be an eye, skin and repository irritant and not a respiratory or skin sensitizer according to health hazard classification criteria. In some cases employees may develop an allergic sensitization to Chromium VI causing an allergic contact dermatitis. Chromium VI is in residual trace concentrations in this product (<0.1%, wt. %). Once reacted, the Chromium VI chemically converts resulting in multiple valence states, the majority being Chromium III, with differing penetration efficiencies across the cell membranes. Tests on Guinea pigs demonstrated that dermal absorption of chromium compounds in general is very low and once converted to Chromium III the chromium has a low potential for crossing the cell membranes in skin/internal organs and tissue (1% efficiency has been documented in some studies).

## 12. Ecological Information

**Ecotoxicity:** NAV for finished product.

Components:

### Formaldehyde

96 hr LC <sub>50</sub> Fathead Minnow	24 mg/L
96 hr LC <sub>50</sub> Bluegill	0.10 mg/L
5 min EC <sub>50</sub> Photobacterium phosphoreum	9 mg/L
96 hr EC <sub>50</sub> Water flea	20 mg/L

### CCA

Study Abstracts: A technical paper published in the Forest Products Journal (September, 1974) by Levi, Huisingsh and Nesbitt described a study conducted to determine if CCA wood preservative in grapevine support posts might be absorbed by the vines, leaves and/or grapes. This study concluded that "CCA" preservatives are bound in wood, are not readily leached and are not concentrated in plants growing close to the treated wood." The Springborn Laboratories Environmental Sciences Division in 1993 conducted a sediment exposure study using leachate from CCA treated and untreated marine pilings and exposing *Ampelisca Abdita* for a period of 10 days. Survival of the organisms during the 10-day exposure period was the biological endpoint used to establish the effects of exposure. Results indicated that leachate from treated pilings had no adverse effect on organism survival. It was concluded that the primary constituents of the CCA-treated wood piling were not present in the leachate at concentrations which would adversely affect the survival of the organisms.

The Food and Drug Administration's (FDA) "Market Basket Survey" has consistently shown that arsenic in tomatoes is below the analytical level of detection despite the increased usage of arsenical-treated wood for tomato stakes. Moreover, even though CCA-treated wood has been increasingly used in applications such as cattle bunks and stalls and poultry brooders for the last ten years, the FDA survey has shown a decrease in the arsenic content of dairy, meat and poultry products.

A study funded in part by the National Oceanic and Atmospheric Administration (NOAA) and prepared by the Marine Resources Division of the South Carolina Department of Natural Resources in 1995 measured the impact of wood preservative leachate from docks in an estuarine environment. Copper, chromium, arsenic and polynuclear aromatic hydrocarbons (PAHs) were measured in composite samples of sediments and naturally occurring oyster populations from creeks with high densities of docks, and from nearby reference creeks with no docks. Sediments from all but one site had metal and total PAH concentrations which were below levels reported to cause biological effects, and the oysters showed no significant difference in their physiological condition. Bioassays were also conducted on four common estuarine species and hatchery reared oysters. The results suggest that wood preservative leachates from dock pilings have no acutely toxic effects on these common species, nor do they affect the survival or growth of juvenile oysters over a six-week period. In some cases, metal leachates may accumulate in sediments and oysters immediately adjacent to pilings, but do not appear to become concentrated in sediments or oysters elsewhere in the same creeks.

**Biopersistence and Degradability:** The wood and resin portions of this product would be expected to be biodegradable.

### Formaldehyde

Trace amounts of free formaldehyde may be released to the atmosphere and would be expected to be removed in the atmosphere by direct photolysis and oxidation by photochemically produced hydroxyl radicals (half-life of a few hours). In the aqueous phase formaldehyde biodegradation is expected to take place in a few days.

## 12. Ecological Information (cont'd.)

**Bioaccumulation and Soil Mobility:** CCA solution, new or old CCA-treated wood, mulch containing CCA wood, and ash from combustion of CCA wood is expected to leach components into soil or water, if in direct contact. Chromium (VI), arsenic, and copper can leach from soil into groundwater and surface water. Expected leaching potential order would be chromium (VI) > arsenic > copper. CCA is expected to persist in soil and remain leachable for years. Chromium (VI) is not expected to accumulate in fish and shellfish. Copper may accumulate in tissues of mussels and oysters. Arsenic may accumulate, primarily in a relatively nontoxic form, in tissues of fish and shellfish.

**Other adverse effects:** NAP

## 13. Disposal Considerations

**Waste Disposal Method:** CAUTION: Do not burn treated wood in open fires, stoves, fireplaces, or residential boilers because toxic chemicals may be produced in the smoke and ash. Treated wood from commercial or industrial use (for example, construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with federal, state, and local regulations. Do not use treated wood as a compost or mulch. CCA treated wood is not listed under any sections of the Canadian National Pollution Release Inventory (NPRI). Check with your federal, state, local or provincial regulatory representatives prior to disposal.

## 14. Transport Information

**Mode:** (air, land, water) Not regulated as a hazardous material by the U.S. Department of Transportation. Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG).

<b>UN Proper Shipping Name:</b>	NAP
<b>UN/NA ID Number:</b>	NAP
<b>Hazard Class:</b>	NAP
<b>Packing Group:</b>	NAP
<b>Environmental Hazards (Marine Pollutant):</b>	NAP
<b>Special Precautions:</b>	NAP

## 15. Regulatory Information

**TSCA:** Ingredients: arsenic, copper, chromium and phenol-formaldehyde resin are on the TSCA inventory.

**CERCLA:** The following ingredients are on the CERCLA inventory: formaldehyde (RQ = 100 lbs.); arsenic (RQ = 1 lb.); chromium, pieces < 100 micrometers diameter (RQ = 5,000 lbs.), copper, pieces < 100 micrometers diameter (RQ = 5,000 lbs.)

**DSL:** The following ingredients are on the Canadian Domestic Substance List (DSL) inventory: formaldehyde, arsenic, chromium and copper.

**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 this product may be considered hazardous. Workplace exposure to formaldehyde (29CFR 1910.1048), arsenic (29CFR 1910.1018), copper (29CFR 1910.1000) and chromium compounds (Chromium VI 29CFR 1910.1026 and 1910.1000) are specifically regulated.

## 15. Regulatory Information (cont'd.)

### STATE RIGHT-TO-KNOW:

California Proposition 65 – This product contains formaldehyde, (a substance known to the State of California to cause cancer) which depending on temperature and humidity, may be emitted from the product. Weyerhaeuser has evaluated formaldehyde emission rates from its products and have found these rates to be below the significant risk level. The user should determine whether formaldehyde emissions resulting from its site specific use, handling, ventilation design, capacity and final construction design for this product could exceed the safe harbor levels.

**Warning:** Drilling, sawing, sanding or machining wood products generates wood dust, arsenic, (inorganic arsenic compounds), and chromium (hexavalent compounds), chemicals/substances known to the State of California to cause cancer or developmental effects.

Pennsylvania – This product contains the following ingredients listed on Pennsylvania's Hazardous Substance Lists: formaldehyde; arsenic, chromium, copper compounds and when cut or otherwise machined, the product may emit wood dust (softwood) which appears on Pennsylvania's Appendix A, Hazardous Substance List.

New Jersey – This product contains the following ingredients listed on Pennsylvania's Hazardous Substance Lists: formaldehyde; arsenic, chromium, copper compounds and when cut or otherwise machined, the product may emit wood dust (softwood) which appears on Pennsylvania's Appendix A, Hazardous Substance List.

**SARA 313 Information:** To the best of our knowledge, this product contains formaldehyde at de minimis concentrations (<0.1%) and is not subjected to the SARA Title III Section 313 supplier notification requirements. Following treatment this product may contain the following listed chemicals: Arsenic pentoxide (CAS #1303-28-2) as an Arsenic Compound, Trivalent Chromium (CAS #1308-38-9) as a Chromium Compound and copper oxide (CAS #1317-39-1) as a Copper Compound.

**SARA 311/312 Hazard Category:** This product has been reviewed according the EPA "Hazard Categories: promulgated under SARA Title III, Sections 311 and 312 and is considered, under applicable definitions, to meet the following categories:

An immediate (acute) health hazard	Yes
A delayed (chronic) health hazard	Yes
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

**FDA:** Not intended for use as a food additive or indirect food contact item.

**WHMIS Classification:** Controlled Product: D2A - Wood dust, arsenic (and arsenic compounds), formaldehyde, and chromium (VI): IARC Group 1.

## 16. Other Information

**Date Prepared:** 10/05/2010

**Date Revised:** 09/13/2016

**Prepared By:** Weyerhaeuser Company Health and Safety

**Weyerhaeuser SDS available on:**

<http://www.wy.com/sustainability/environment/product-stewardship/safety-data-sheets/>

**User's Responsibility:** The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to ensure that the most current SDS is used.

## 16. Other Information (cont'd.)

### Definition of Terms

ACGIH®	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DOT	=	U. S. Department of Transportation
DSL	=	Domestic Substance List
EC#	=	Identifying Number Assigned to Chemicals Contained in the European Inventory of Existing Chemical Substances (EINECS)
EC <sub>50</sub>	=	Effective Concentration That Inhibits the Endpoint to 50% of Control Population
EPA	=	U.S. Environmental Protection Agency
GHS	=	Globally Harmonized System of Classification and Labelling of Chemicals
HMIS	=	Canada-Hazardous Materials Identification System
HNOC	=	Hazards Not Otherwise Classified
IARC	=	International Agency for Research on Cancer
IATA	=	International Air Transport Association
IMDG	=	International Maritime Dangerous Goods
LC <sub>50</sub>	=	Concentration in Air Resulting in Death To 50% of Experimental Animals
LCLo	=	Lowest Concentration in Air Resulting in Death
LD <sub>50</sub>	=	Administered Dose Resulting in Death to 50% of Experimental Animals
LDLo	=	Lowest Dose Resulting in Death
LEL	=	Lower Explosive Limit
LFL	=	Lower Flammable Limit
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NFPA	=	National Fire Protection Association
NPRI	=	Canada-National Pollution Release Inventory
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
PNOR	=	Particulate Not Otherwise Regulated
PNOS	=	Particulate Not Otherwise Specified
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TCLo	=	Lowest Concentration in Air Resulting in a Toxic Effect
TDG	=	Canada-Transportation of Dangerous Goods
TDLo	=	Lowest Dose Resulting In a Toxic Effect
TLV	=	Threshold Limit Value
TSCA	=	Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	Canada-Workplace Hazardous Materials Information System

# Parallam® Plus PSL (CCA)



## Danger

**Wood dust may cause nasopharyngeal cancer and/or cancer of the nasal cavities and paranasal sinuses by inhalation. May cause respiratory, skin and eye irritation. May cause an allergic skin reaction.**

**May form combustible dust concentrations in air if small particles are formed during processing or handling.**

**Precautions:** Avoid breathing dust and wear appropriate protective equipment for respiratory, skin or eye exposures. Prevent dust release and accumulations to minimize hazards. Take off contaminated clothing and wash before reuse. Keep dust away from ignition sources such as heat, sparks, and flame. Do not burn treated wood in open fires, stoves, fireplaces, or residential boilers.

**First Aid:** If on skin wash with plenty of mild soap and water. If in eyes, rinse cautiously for several minutes. Remove contact lenses if present and easy to do so. If experiencing respiratory symptoms, remove to fresh air. Contact a qualified medical professional for serious or persistent skin, eye or respiratory symptoms.

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