SAFETY DATA SHEET CCA Treated Wood

#### SECTION ONE - IDENTIFICATION

MANUFACTURER'S NAME: BALDWIN POLE & PILING COMPANY, INC.

ADDRESS: P. O. DRAWER 758 CHEMTREC #: 1-800-424-9300 CITY, STATE, and ZIP: BAY MINETTE, AL 36507 TELEPHONE #: 251-937-2141

#### SECTION TWO - HAZARDOUS INGREDIENTS / IDENTITY

PHYSICAL HAZARDS Not classified.

HEALTH HAZARDS Carcinogenicity (inhalation) Category 1A

OSHA DEFINED HAZARDS Combustible Dust

LABEL ELEMENTS



SIGNAL WORD DANGER

HAZARD STATEMENT May cause cancer by inhalation. 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. Wear protective gloves/clothing/eye protection/face protection.

Prevent dust accumulation to minimize explosion hazard. Observe good industrial hygiene practices.

RESPONSE If exposed or concerned: Get medical advice/attention. Take off contaminated clothing and wash before re-use. In case of

 $fire: use\ water\ fog,\ foam,\ carbon\ dioxide,\ dry\ chemical\ for\ extinction.\ Collect\ spillage.$ 

 $STORAGE \hspace{1cm} Store \ away \ from \ incompatible \ materials.$ 

 $DISPOSAL \qquad \quad Dispose \ of \ contents \ in \ accordance \ with \ local/regional/national/international \ regulations.$ 

## SECTION THREE - COMPOSITION/INFORMATIOPN ON INGREDIENTS

## MIXTURES

CHEMICAL NAME	CAS number	<u>%</u>
Arsenic Pentoxide	1303-28-2	<3
Copper Oxide	1317-39-1	<1.5
Trivalent Chromium	1308-38-9	<3.5
Wood	N/A	<85

Composition Comments All Concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits.

## SECTION FOUR - 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. In cases of rashes, wounds or other skin disorders: seek medical attention and bring these instructions.

Eye Contact Do not rub eye. Immediately flush eyes with plenty of water. Remove any contact lenses and open eyelids wide apart. If irritation

persists get medical attention.

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

Most important symptoms/effects,

acute and delayed 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.

Immediate medical attention and special

treatment needed If one ounce of treated wood dust per 10 pounds of body weight are ingested, acute arsenic intoxication is a possibility.

General information Ensure that medical personnel are aware of the materials involved, and take precautions to protect themselves.

#### SECTION FIVE - FIRE-FIGHTING MEASURES

Suitable extinguishing

media. Water fog. Foam. Carbon Dioxide (C02). Dry chemical powder. Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguish

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

Special hazards arising

from the chemical. Explosion hazard: 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 explosive) 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. Toxic vapors from wood and preservation may be given off in a fire. Ash will contain free arsenic and chromium and may be toxic.

Special protective equipment and precautions for

Firefighters Self-Contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/

instructions In case of fire and /or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

General fire hazards May form combustible dust concentrations in the air.

## SECTION SIX - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Use only non-sparking tools. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosion mixture if they are released into the atmosphere in sufficient concentrations. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significate spillages cannot be contained. For personal protection, see section eight (8) of the SDS.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk.

## SECTION SEVEN - HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Avoid significate deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces – NO Smoking. Explosion-proof general and local exhaust ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Do not burn preserved wood. Do not use preserved wood as mulch. Observe good industrial hygiene practices.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**: Keep away from heat, sparks, open flames and other sources of ignition. Store away from incompatible materials (see section 10 of SDS).

## SECTION EIGHT - EXPOSURE CONTROLS / PERSONAL PROTECTION

Components		Type	Value	Form
Wood Dust (CAS N/A)		PEL	5 mg/m3	Respirable dust
			15 mg/m3	Total fraction
U. S. OSHA Table Z-1 Limits for Air Con	ntaminants (29 CF	FR 1910.1000)		
Components		Type	Value	
Trivalent Chromium (CAS 1308-38-9)		PEL	0.5 mg/m3	
ACGIH				
Components		Type	Value	Form
Wood Dust (CAS N/A)		TWA	1 mg/m3	Inhalable fraction
U. S. ACGIH Threshold Limit Values				
Components		Type	Value	
Arsenic Pentoxide (CAS 1303-28-2)		TWA	0.01 mg/m3	
Trivalent Chromium (CAS 1308-38-9)		TWA	0.5 mg/m3	
U. S. NIOSH: Pocket guide to Chemical I	Hazards			
Components		Type	Value	Form
Arsenic Pentoxide (CAS 1303-28-2)		Ceiling	0.002 mg/m3	
Components		Type	Value	Form
Copper Oxide (CAS 1317-39-1)		TWA	1 mg/m3	Dust and Mist
Trivalent Chromium (CAS 1308-38-9)		TWA	0.5 mg/m3	
Wood Dust (CAS N/A)		TWA	1 mg/m3	Dust
Biological limit values ACGIH Biological Exposure Indices				
Components	Value	Determinant	Specimen	Sampling Time
Arsenic Pentoxide (CAS 1303-28-2)	35 ug/l	Inorganic arsenic, plus methylated metabolites as AS	Urine	*

<sup>\*-</sup> for sampling details please see the source document.

APPROPRIATE ENGINEERING CONTROLS: Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

## INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT.

EYE/FACE PROTECTION: Wear dust-resistant safety goggles with side shields where there is danger of eye contact.

SKIN PROTECTION: When handling wood, wear leather or fabric gloves. Wear suitable protective clothing. Use of an impervious apron is recommended.

**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 1910.34, 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.

# SECTION NINE - PHYSICAL AND CHEMICAL PROPERTIES

# APPEARANCE

Physical State Solid Solid Form Yellow/Green Color Wood odor Odor Odor Threshold Not Available pН Not Applicable Melting / freezing point Not Applicable Flash point Not Available Evaporation rate Not Available

Flammability (solid, gas) Combustible solid Flammability limit (%) – upper Not Available Flammability limit (%) – lower Not Available Explosive limit (%) – upper Not Available Explosive limit (%) – lower Not Available Vapor Pressure Not Applicable Vapor Density Not Applicable Relative Density Not Available Solubility (water) Highly insoluble Auto-ignition Temperature Not Available Decomposition Temp. Not Available Viscosity Not Applicable Density As Wood

#### SECTION TEN - STABILITY and REACTIVITY

REACTIVITY: the product is stable and non-reactive under normal conditions of use, storage and transport.

**CHEMICAL STABILITY**: Material is stable under normal conditions.

POSSIBILITY OF HAZARDOUS REACTIONS: No dangerous reaction known under conditions of normal use.

**CONDITIONS TO AVOID**: Keep away from heat, sparks and open flames. Minimize dust generation and accumulation. Contact with incompatible materials.

**INCOMPATIBLE MATERIALS**: Strong oxidizing agents.

**HAZARDOUS DECOMPOSITION PRODUCTS**: Toxic vapors from wood and preservative may be given off in a fire. Ash will contain free arsenic and chromium and may be toxic.

#### SECTION ELEVEN - 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 reactions in sensitized individuals.

**EYE CONTACT**: Dust may irritate eyes.

<u>INGESTION</u>: Not likely, due to the form of the product. However, ingestion of dusts generated during working operations may cause nausea and vomiting. If one ounce of treated wood dust per 10 pounds of body weight are ingested, acute arsenic intoxication is a possibility. 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: 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 acute toxic.

**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 dust can result in hypersensitivity

**SKIN SENSITIZATION**: Exposure to wood dust can result in 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.

**CARCINOGENICITY**: May cause cancer by inhalation. This classification is based on increased of nasal and paranasal cancers in people exposed to wood dusts.

# IARC MONOGRAPHS. OVERALL EVALUATION OF CARCINOGENICITY:

Arsenic Pentoxide (CAS 1303-28-2)

1 Carcinogenic to humans

Trivalent Chromium (CAS 1308-38-9)

3 Not classifiable as to carcinogenicity to humans

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

NTP REPORT ON CARCINOGENS

Arsenic Pentoxide (CAS 1303-28-2)

Wood Dust (CAS N/A)

Known to be Human Carcinogen

Known to be Human Carcinogen

#### OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050)

Arsenic Pentoxide (CAS 1303-25-2)

Cancer

**REPRODUCTIVE TOXICITY**: This product is not expected to cause reproductive or development effects.

ASPIRATION HAZARD: Not likely, due to the form of the product.

<u>CHRONIC EFFECTS</u>: Chronic exposure to wood dusts can result in pneumonitis, coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis. Individuals with pre-existing disease in or a history of ailments involving the skin, kidney, liver, respiratory tract, eyes or nervous system are at greater than normal risk of developing adverse effects from woodworking operations with this product.

FURTHER INFORMATION: The effects of industrial exposure to the chrome-arsenic preservatives used to treat CCA wood has been evaluated in three independent epidemiology studies. In each case the authors concluded that workers exposed on a daily basis to these preservatives were at no increased risk of death or disease as a result of their exposure.

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 the exposure approximates the skin cancer risk from sunlight experienced during play periods. Leaf, stem and fruit of grape plants grown adjacent to CCA treated wood poles did not take up preservative components from the poles above background levels (limit of detection 0.2 and 0.05 ppm for chrome and arsenic, respectively).

#### SECTION TWELVE - ECOLOGICAL INFORMATION

**ECOTOXICITY**: The product is not classified as environmentally hazardous.

PERSISTENCE AND DEGRADABILITY: No data is available on the degradability of this product.

BIOACCUMULATION POTENTIAL: No data available on bioaccumulation.

MOBILITY IN SOIL: The product is insoluble in water.

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.

#### SECTION THIRTEEN - DISPOSAL CONSIDERATIONS

**DISPOSAL INSTRUCTIONS:** Dispose in accordance with all applicable regulations. DO NOT BURN. Ash may be toxic and a hazardous waste; combustible vapors may be toxic.

HAZARDOUS WASTE CODE: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

#### SECTION FOURTEEN - TRASPORTATION INFORMATION

**DOT**: Not regulated as dangerous goods.

**IATA**: Not regulated as dangerous goods.

**IMDG**: Not regulated as dangerous goods.

# SECTION FIFTEEN - REGULATORY INFORMATION

U. S. FEDERAL REGULATIONS: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are listed on or exempt from the U. S. EPA TSCA Inventory List.

## TSCA SECTION 12(b) EXPORT NOTIFICATION (40 CFR 707, SUBPART D): Not Regulated.

## OSHA SPECIFICALLY REGULATED SUBSTANCES (29 CFR 1910.1001-1050):

Arsenic Pentoxide (CAS 1303-28-2) Cancer

Liver

Skin

Yes

Respiratory irritation Nervous system Acute toxicity

# CERCLA HAZARDOUS SUBSTANCE LIST (40 CFR 302.4):

Arsenic Pentoxide (CAS 1303-28-2)
Copper Oxide (CAS 1317-39-1)
Listed
Trivalent Chromium (CAS 1308-38-9)
Listed

#### SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA):

Hazard Categories Immediate Hazard - No

Delayed Hazard – Yes Fire Hazard – Yes Pressure Hazard – No Reactivity Hazard – No

## **SARA 302 EXTREMELY HAZARDOUS SUBSTANCE:**

Chemical Name	CAS Number	Reportable Quantity (pounds)	Threshold planning quantity (pounds)	1 0	Threshold planning quantity upper value
				(pounds)	(pounds)
Arsenic Pentoxide	1303-28-2	1		100	10000

## SARA 311/312 HAZARDOUS CHEMICAL

## **SARA 313 (TRI REPORTING)**

Chemical Name	CAS Number	% by weight	
Arsenic Pentoxide	1303-28-2	<3	
Copper Oxide	1317-39-1	<1.5	
Trivalent Chromium	1308-38-9	<3.5	

## **OTHER FEDERAL REGULATIONS**

# Clean Air Act (CCA) Section 112 Hazardous Air Pollutants (HAPs) List

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

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

Not Regulated

Safe Water Drinking Act (SWDA) Not regulated

## **U.S. State Regulations**

## US. Massachusetts RTK – Substance List

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

# US. New Jersey Worker and Community Right-to-know Act

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9) Copper Oxide (CAS 1317-39-1)

# Wood Dust (CAS N/A) US. Pennsylvania Worker and Community Right-to-know Act

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9)

Wood Dust (CAS N/A)

## US. Rhode Island RTK

Arsenic Pentoxide (CAS 1303-28-2) Trivalent Chromium (CAS 1308-38-9) Copper Oxide (CAS 1317-39-1)

## **US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

## US - California Proposition 65 - Carcinogens and 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).

## SECTION SIXTEEN - OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue Date April 5, 2015

Revision Date

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

E – Safety Glasses, Cloves, Dust Respirator.

PERCENT OF HAZARDOUS INGREDIENTS COMPONENT %:

0.25 pcf

Arsenic Pentoxide 0.3%, Copper Oxide 0.15%, Chromium Trioxide 0.4%, Wood Dust\* 84.28%

0.4 pcf

 $Arsenic\ Pentoxide\ 0.4\%,\ Copper\ Oxide\ 0.2\%,\ Chromium\ Trioxide\ 0.6\%,\ Wood\ Dust*\ 83.98\%$ 

0.6 pcf

Arsenic Pentoxide 0.6%, Copper Oxide 0.3%, Chromium Trioxide 0.9%, Wood Dust\* 83.47%

1.0 pcf

Arsenic Pentoxide 1.0%, Copper Oxide 0.6%, Chromium Trioxide 1.4%, Wood Dust\* 82.45%

2.5 pcf

Arsenic Pentoxide 2.6%, Copper Oxide 1.3%, Chromium Trioxide 3.3%, Wood Dust\* 78.88%

\*This represents the maximum amount of wood dust that could be generated if the wood was completely machined.

The above percentages are based on the application retention, a wood density of 32 pcf., and a moisture contact of 15%, the above values may vary due to the variability of treatment and the natural variability of wood.

HMIS® ratings Health: 1\*

Flammability: 1 Physical Hazard: 0 Personal protection: E

Disclaimer

Baldwin Pole & Piling Company, Inc. 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.