

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Chromated Copper Arsenate (CCA) Treated Wood

**Other means of identification SDS** 244-TIM-E

**Recommended use** Preservative Treated Wood for various weather protected and exterior uses.

**Recommended restrictions** Outdoor residential structures such as decks and playgrounds.

### Manufacturer/Importer/Supplier/Distributor information

Customers of Timber Specialties Limited

**Company name**

**Address**

**Telephone number**

**E-mail**

**Contact person**

**Emergency phone number**

## 2. Hazard(s) identification

**Physical hazards** Combustible dusts Category 1

**Health hazards** Carcinogenicity (inhalation) Category 1A

### Label elements

**Hazard symbol**



**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 (see Section 16). Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Prevent dust accumulation to minimize explosion hazard. Observe good industrial hygiene practices.

**Response**

If exposed or concerned: Get medical advice/attention. In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder or water fog for extinction.

**Disposal**

Dispose in accordance with local/regional/national/international regulations.

**Other hazards**

None known.

**Supplemental information**

None.

## 3. Composition/information on ingredients

### Mixtures

| Chemical name      | CAS number | %     |
|--------------------|------------|-------|
| Wood/Wood dust     | N/A        | > 92  |
| Trivalent Chromium | 1308-38-9  | > 3.5 |
| Arsenic Pentoxide  | 1303-28-2  | < 3   |
| Copper Oxide       | 1317-39-1  | < 1.5 |

### Composition comments

Depending on the additives applied to the treating solution, this wood may also contain < 1% of mold inhibitors, <1% of an oil emulsion, and <1% of a colorant. Components not listed are either non-hazardous or are below reportable limits.

## 4. First-aid measures

### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist. Some species may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals.

### Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists. 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 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 attention.

### Ingestion

Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

### 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. Mechanical irritation of skin, eyes and respiratory system.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. If one ounce of treated wood dust per 10 lbs. of body weight are ingested, acute arsenic intoxication is a possibility. Symptoms may be delayed.

### General information

If exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

### Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Apply extinguishing media carefully to avoid creating airborne dust.

### Unsuitable extinguishing media

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

### Specific hazards arising from the chemical

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

### 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.

### Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

### General fire hazards

May form combustible dust concentrations in air.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Use only non-sparking tools. Avoid generation and spreading of dust. Avoid inhalation of dust. Provide adequate ventilation. Wear appropriate personal protection 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. Flush area with water. Clean surface thoroughly to remove residual contamination. For waste disposal, see Section 13.

### Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

### Precautions for safe handling

Read SDS before use. Observe good industrial hygiene practices. Minimize dust generation and accumulation. Avoid significant 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, spark, open flames and other sources of ignition. Explosion-proof general and local exhaust ventilation. Avoid prolonged exposure. Wear appropriate personal protective equipment (See Section 8). Avoid release to the environment. Do not burn preserved wood. Do not use preserved wood as mulch.

**Conditions for safe storage, including any incompatibilities**

Keep away from heat, spark, open flames and other sources of ignition. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

| Components                         | Type | Value  | Form                    |
|------------------------------------|------|--|-------------------------|
| Arsenic pentoxide (CAS 1303-28-2)  | TWA  | 0.01 mg/m <sup>3</sup>                       |                         |
| Copper Oxide (CAS 1317-39-1)       | TWA  | 1 mg/m <sup>3</sup><br>0.2 mg/m <sup>3</sup> | Dust and mist.<br>Fume. |
| Trivalent Chromium (CAS 1308-38-9) | TWA  | 0.5 mg/m <sup>3</sup>                        |                         |
| Wood / Wood dust (CAS N/A)         | TWA  | 1 mg/m <sup>3</sup>                          | Inhalable fraction.     |

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components                         | Type | Value                  | Form        |
|------------------------------------|------|------------------------|-------------|
| Arsenic pentoxide (CAS 1303-28-2)  | TWA  | 0.01 mg/m <sup>3</sup> |             |
| Trivalent Chromium (CAS 1308-38-9) | TWA  | 0.5 mg/m <sup>3</sup>  |             |
| Wood / Wood dust (CAS N/A)         | TWA  | 0.5 mg/m <sup>3</sup>  | Total dust. |

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components                         | Type | Value                  | Form  |
|------------------------------------|------|------------------------|-------|
| Arsenic pentoxide (CAS 1303-28-2)  | TWA  | 0.01 mg/m <sup>3</sup> |       |
| Trivalent Chromium (CAS 1308-38-9) | TWA  | 0.5 mg/m <sup>3</sup>  |       |
| Wood / Wood dust (CAS N/A)         | TWA  | 1 mg/m <sup>3</sup>    | Dust. |

#### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components                         | Type | Value  | Form                    |
|------------------------------------|------|--|-------------------------|
| Arsenic pentoxide (CAS 1303-28-2)  | TWA  | 0.01 mg/m <sup>3</sup>                       |                         |
| Copper Oxide (CAS 1317-39-1)       | TWA  | 1 mg/m <sup>3</sup><br>0.2 mg/m <sup>3</sup> | Dust and mist.<br>Fume. |
| Trivalent Chromium (CAS 1308-38-9) | TWA  | 0.5 mg/m <sup>3</sup>                        |                         |

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components                         | Type        | Value  | Form                    |
|------------------------------------|-------------|--|-------------------------|
| Arsenic pentoxide (CAS 1303-28-2)  | STEL<br>TWA | 0.05 mg/m <sup>3</sup><br>0.01 mg/m <sup>3</sup> |                         |
| Trivalent Chromium (CAS 1308-38-9) | TWA         | 0.5 mg/m <sup>3</sup>                            |                         |
| Wood / Wood dust (CAS N/A)         | STEL<br>TWA | 10 mg/m <sup>3</sup><br>1 mg/m <sup>3</sup>      | Dust.<br>Dust.          |
| Copper (CAS 7440-50-8)             | TWA         | 1 mg/m <sup>3</sup><br>0.2 mg/m <sup>3</sup>     | Dust and mist.<br>Fume. |

#### Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

| Components                        | Type | Value                 | Form  |
|-----------------------------------|------|-----------------------|-------|
| Arsenic pentoxide (CAS 1303-28-2) | TWA  | 0.1 mg/m <sup>3</sup> |       |
| Wood / Wood dust (CAS N/A)        | TWA  | 2.5 mg/m <sup>3</sup> | Dust. |

### Biological limit values

#### ACGIH Biological Exposure Indices

| Components                        | Value   | Determinant   | Specimen | Sampling Time |
|-----------------------------------|---------|---|----------|---------------|
| Arsenic Pentoxide (CAS 1303-28-2) | 35 µg/l | Inorganic arsenic, plus methylated, metabolites as As | Urine    | *             |

\*- For sampling details, please see the source document.

|  |   |
|--|---|
| <b>Appropriate engineering controls</b>                                      | Good general ventilation 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. |
| <b>Individual protection measures, such as personal protective equipment</b> |   |
| <b>Eye/face protection</b>   | Wear safety glasses with side shields or safety goggles when sawing or cutting.   |
| <b>Skin protection</b>   |   |
| <b>Hand protection</b>   | Leather gloves provide sufficient hand protection. Chemical resistant gloves may be necessary for handling freshly treated wood.  |
| <b>Other</b>   | Wear long sleeve shirt, pants, and closed-toed shoes when handling wood.  |
| <b>Respiratory protection</b>  | In case of insufficient ventilation, wear suitable respiratory equipment. Wear dust mask when sawing or sanding wood. If exposure limits are exceeded or if irritation is experienced, a NIOSH-approved positive pressure self-contained breathing apparatus should be worn.  |
| <b>Thermal hazards</b>   | Wear appropriate thermal protective clothing, when necessary.   |
| <b>General hygiene considerations</b>  | Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, chewing gum, using tobacco, or using the toilet.   |

## 9. Physical and Chemical Properties

|   |                     |
|---|---------------------|
| <b>Appearance</b>                                   |                     |
| <b>Physical state</b>                               | Solid.              |
| <b>Form</b>   | Solid. Chips. Dust. |
| <b>Color</b>  | Yellow/green.       |
| <b>Odor</b>   | Wood odor.          |
| <b>Odor threshold</b>                               | Not available.      |
| <b>pH</b>   | Not applicable.     |
| <b>Melting point/freezing point</b>                 | Not applicable.     |
| <b>Initial boiling point and boiling range</b>      | Not applicable.     |
| <b>Flash Point</b>                                  | Not available.      |
| <b>Evaporation rate</b>                             | Not applicable.     |
| <b>Flammability (solid, gas)</b>                    | Combustible dust.   |
| <b>Upper/lower flammability or explosive limits</b> |                     |
| <b>Flammability limit – lower (%)</b>               | Not available.      |
| <b>Flammability limit - upper (%)</b>               | Not available.      |
| <b>Vapor pressure</b>                               | Not applicable.     |
| <b>Vapor density</b>                                | Not applicable.     |
| <b>Relative density</b>                             | Not available.      |
| <b>Solubility(ies)</b>                              |                     |
| <b>Solubility (water)</b>                           | Highly insoluble.   |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.      |
| <b>Auto-ignition temperature</b>                    | Not applicable.     |
| <b>Decomposition temperature</b>                    | Not available.      |
| <b>Viscosity</b>                                    | Not applicable.     |
| <b>Other Information</b>                            |                     |
| <b>Explosive properties</b>                         | Not explosive.      |
| <b>Oxidizing properties</b>                         | Not oxidizing.      |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is non-reactive under normal conditions of use, storage and transport.  |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.   |
| <b>Conditions to avoid</b>                | Avoid heat, sparks, open flames and other ignition sources. Avoid contact with incompatible materials. Minimize dust generation and accumulation. |
| <b>Incompatible materials</b>             | Strong oxidizing agents.  |

**Hazardous decomposition products**

Ash will contain free arsenic and chromium and may be toxic.

## 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 high concentrations of dusts generated during working operations may cause nausea, gastrointestinal irritation, cramping and vomiting. If one ounce of treated wood dust per 10 lbs. 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 acutely 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/Wood dust (CAS N/A) Dermal sensitization. Respiratory sensitization.

**Canada - Alberta OELs: Irritant**

Trivalent Chromium (CAS 1308-38-9) Irritant

**Canada - Manitoba OELs Hazard: Dermal sensitization**

Wood / Wood dust (CAS N/A) Dermal sensitization

**Canada - Manitoba OELs Hazard: Respiratory sensitization**

Wood / Wood dust (CAS N/A) Respiratory sensitization

**Canada - Saskatchewan OELs Hazard Data: Sensitizer**

Wood / Wood dust (CAS N/A) Sensitizer

**Respiratory sensitization**

Exposure to wood dusts can result in hypersensitivity.

**Skin sensitization**

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 data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

### Carcinogenicity

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

**ACGIH Carcinogens**

Arsenic Pentoxide (CAS 1303-28-2)

A1 Confirmed human carcinogen.

Trivalent Chromium (CAS 1308-38-9)

A4 Not classifiable as a human carcinogen.

Wood/Wood dust (CAS N/A)

A1 Confirmed human carcinogen. A2 Suspected human carcinogen.

**Canada - Alberta OELs: Carcinogen category**

Arsenic Pentoxide (CAS 1303-28-2)

Confirmed human carcinogen.

**Canada - Manitoba OELs: carcinogenicity**

Arsenic Pentoxide (CAS 1303-28-2)

Confirmed human carcinogen.

Trivalent Chromium (CAS 1308-38-9)

Not classifiable as a human carcinogen.

Wood/Wood dust (CAS N/A)

Confirmed human carcinogen. Suspected human carcinogen.

## 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/Wood dust (CAS N/A)           | 1 Carcinogenic to humans.                           |

## US. National Toxicology Program (NTP) Report on Carcinogens

|                                   |                               |
|-----------------------------------|-------------------------------|
| Arsenic Pentoxide (CAS 1303-28-2) | Known To Be Human Carcinogen. |
| Wood/Wood dust (CAS N/A)          | Known To Be Human Carcinogen. |

|   |  |
|---|--|
| <b>Reproductive toxicity</b>                              | This product is not expected to cause reproductive or developmental effects.   |
| <b>Specific target organ toxicity - single exposure</b>   | Not classified.  |
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified.  |
| <b>Aspiration hazard</b>                                  | Not likely, due to the form of the product.  |
| <b>Chronic effects</b>                                    | Chronic exposure to wood dusts can result in pneumonitis, and 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 a greater than normal risk of developing adverse effects from woodworking operations with this product.  |
| <b>Further information</b>                                | The effects of industrial exposure to the chrome-copper-arsenic preservative 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 the 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). |

## 12. Ecological information

|                                      |  |
|--------------------------------------|--|
| <b>Ecotoxicity</b>                   | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| <b>Persistence and degradability</b> | No data is available on the degradability of this product.   |
| <b>Bioaccumulative potential</b>     | No data available on bioaccumulation.  |
| <b>Mobility in soil</b>              | This product is insoluble in water.  |
| <b>Other adverse effects</b>         | 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

|  |   |
|--|---|
| <b>Disposal instructions</b>                 | Dispose of contents in accordance with municipal, provincial, and federal regulations. DO NOT BURN! Ash may be toxic and a hazardous waste; combustion vapors may be toxic. |
| <b>Local disposal regulations</b>            | Dispose in accordance with provincial requirements.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  |
| <b>Waste from residues / unused products</b> | Dispose in accordance with local regulations. This material must be disposed of in a safe manner (see: Disposal instructions).  |

## 14. Transport information

|   |                                   |
|---|-----------------------------------|
| <b>TDG</b>  | Not regulated as dangerous goods. |
| <b>IATA</b>   | Not regulated as dangerous goods. |
| <b>IMDG</b>   | Not regulated as dangerous goods. |
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | Not applicable.                   |

## 15. Regulatory information

### Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

#### Controlled Drugs and Substances Act

Not regulated.

#### Export Control List (CEPA 1999, Schedule 3)

Not listed.

#### Greenhouse Gases

Not listed.

#### Precursor Control Regulations

Not regulated.

### International regulations

**Stockholm Convention** Not applicable.

**Rotterdam Convention** Not applicable.

**Kyoto protocol** Not applicable.

**Montreal Protocol** Not applicable.

**Basel Convention** Not applicable.

### International Inventories

| Country(s) or region        | Inventory name   | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)   | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)  | No                     |
| New Zealand                 | New Zealand Inventory  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | 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

**Issue date** 04-28-2017

**Revision date** 01-30-2019

**Version No.** 03

**Special Instructions** If you expect to generate wood dust, read Sections 4, 7, 8, and 11.

**Disclaimer** Supplier 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.