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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood/Wood dust</td>
<td>N/A</td>
<td>&gt; 92</td>
</tr>
<tr>
<td>Trivalent Chromium</td>
<td>1308-38-9</td>
<td>&gt; 3.5</td>
</tr>
<tr>
<td>Arsenic Pentoxide</td>
<td>1303-28-2</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>Copper Oxide</td>
<td>1317-39-1</td>
<td>&lt; 1.5</td>
</tr>
</tbody>
</table>

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.

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 (CO2). 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.
8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Copper Oxide (CAS 1317-39-1)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust and mist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>Trivalent Chromium (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Wood / Wood dust (CAS N/A)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Trivalent Chromium (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Wood / Wood dust (CAS N/A)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Trivalent Chromium (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Wood / Wood dust (CAS N/A)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>TWA</td>
<td>0.01 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Copper Oxide (CAS 1317-39-1)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust and mist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 mg/m³</td>
<td>Fume.</td>
</tr>
<tr>
<td>Trivalent Chromium (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>STEL</td>
<td>0.05 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>0.01 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Trivalent Chromium (CAS 1308-38-9)</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Wood / Wood dust (CAS N/A)</td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>Dust.</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust.</td>
</tr>
<tr>
<td>Copper (CAS 7440-50-8)</td>
<td>TWA</td>
<td>1 mg/m³</td>
<td>Dust and mist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.2 mg/m³</td>
<td>Fume.</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic pentoxide (CAS 1303-28-2)</td>
<td>TWA</td>
<td>0.1 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Wood / Wood dust (CAS N/A)</td>
<td>TWA</td>
<td>2.5 mg/m³</td>
<td>Dust.</td>
</tr>
</tbody>
</table>

Biological limit values

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic Pentoxide (CAS 1303-28-2)</td>
<td>35 µg/l</td>
<td>Inorganic arsenic, plus methylated, metabolites as As</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

*- For sampling details, please see the source document.
Appropriate engineering controls
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.

Individual protection measures, such as personal protective equipment
Eye/face protection
Wear safety glasses with side shields or safety goggles when sawing or cutting.

Skin protection
Hand protection
Leather gloves provide sufficient hand protection. Chemical resistant gloves may be necessary for handling freshly treated wood.

Other
Wear long sleeve shirt, pants, and closed-toed shoes when handling wood.

Respiratory protection
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.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

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

10. Stability and reactivity
Reactivity
The product is 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
Avoid heat, sparks, open flames and other ignition sources. Avoid contact with incompatible materials. Minimize dust generation and accumulation.
Incompatible materials
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: Sensitiser
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
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.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not likely, due to the form of the product.

Chronic effects
Chronic exposure to wood dusts can result in pneumonitis, and coughing, wheezing, fever and the other signs and symptoms associated with chronic bronchitis. 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.

Further information
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

Ecotoxicity
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.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available on bioaccumulation.

Mobility in soil
This 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.

13. Disposal considerations

Disposal instructions
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.

Local disposal regulations
Dispose in accordance with provincial requirements.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose in accordance with local regulations. This material must be disposed of in a safe manner (see: Disposal instructions).

14. Transport information

TDG
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

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

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>(EINECS)</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

* 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.