Material Safety Data Sheet

Material Name: CCA Type C Pressure-Treated Wood **ID: CSI-048**

* * * Section 1 - Chemical Product and Company Identification * * *

Product Use: Lumber
Synonyms: Pressure treated wood with Chromated Copper Arsenate
Manufacturer Information

Chemical Specialties, Inc.
PO Box 1330
5910 Pharr Mill Road
Harrisburg, NC 28075

Phone: 704-455-4171
Fax: 704-455-6507
Emergency # CHEMTREC: (800) 424-9300

General Comments

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to customer service.

* * * Section 2 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
Not Available	Wood/Wood dust	91-99.5
1333-82-0	Chromium (VI) trioxide (CrO3)	0.25-1.0; 1.0-4.0
7778-39-4	Arsenic acid	0.15-1.0; 1.0-4.0
1317-38-0	Copper oxide	0.10-1.0; 1.0-2.0

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Wood dust, all soft and hard woods, Wood dusts-soft woods, Wood dusts-hard wood, Chromium (7440-47-3), Chromium (VI) (18540-29-9), Chromium (VI) compounds, Arsenic (7440-38-2), Arsenic, inorganic compounds, Copper(+1) oxide (1317-39-1), Copper compounds, n.o.s., Copper dusts and mists.

Component Information/Information on Non-Hazardous Components

CCA Type C Pressure Treated Wood products are made up of >90% "wood" and <10% CCA Type C 50%-60% EPA registered wood preservatives; EPA Registration No.: 10465-26 (CCA50%), 10465-28 (CCA60%)
EPA Est. No.: 10465-NC-2, 10356-GA-1, 10365-TX-1

This product is considered hazardous under the criteria specified in 29 CFR 1910.1200 (Hazard Communication Standard) and considered a controlled product under the Canadian Workplace Hazardous Materials Information System (WHMIS).

The above percentage ranges are in compliance with the Canadian Workplace Hazardous Information System (WHMIS).

* * * Section 3 - Hazards Identification * * *

Emergency Overview

WARNING
CANCER HAZARD
Product dust may form explosive mixture with air. Product dusts may cause irritation to the eyes, skin and respiratory tract. Product contains a known sensitizing agent.

Potential Health Effects: Eyes

Product dust may cause irritation to the eyes. Symptoms can include irritation, redness, scratching of the cornea, and tearing.

Potential Health Effects: Skin

Product dust may cause irritation to the skin. Mechanical rubbing may increase skin irritation. Product may cause dermatitis or allergic skin reactions in sensitized individuals.

Potential Health Effects: Ingestion

Ingestion of wood product or product dust is unlikely. If ingestion does occur, slight gastrointestinal irritation may result. Certain species of wood and their dusts may contain natural toxins which can have adverse effects in humans.

Potential Health Effects: Inhalation

Product dust is irritating to the nose, throat and lungs. Symptoms may include nasal dryness, deposits or obstructions in the nasal passages, coughing, sneezing, dryness and soreness of throat and sinuses, hoarseness, and wheezing. Prolonged or repeated inhalation of product dusts may cause respiratory irritation, recurrent bronchitis and prolonged colds. Some species of wood and product dusts may cause allergic respiratory reactions with asthma-like symptoms in sensitized individuals. Prolonged exposure to wood dust by inhalation has been reported to be associated with nasal and paranasal cancer.

Medical Conditions Aggravated by Exposure

Pre-existing eye, respiratory system and skin conditions.

HMIS Ratings: Health: 1* **Fire:** 1 **Physical Hazard:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention.

First Aid: Skin

For skin contact, wash immediately with soap and water. Continue flushing skin with water for 15 minutes. If irritation persists, get medical attention. If wood splinters are injected under the skin, get medical attention immediately.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation

If dusts are inhaled, remove person to fresh air. If symptoms persist, get medical attention.

First Aid: Notes to Physician

Respiratory ailments and pre-existing skin conditions may be aggravated by exposure to product dust.

* * * Section 5 - Fire Fighting Measures * * *

Flash Point: Not applicable
Method Used: Not available
Upper Flammable Limit (UFL): Not available
Lower Flammable Limit (LFL): Not available
Auto Ignition: Not available
Flammability Classification: Flammable
Rate of Burning: Not available

General Fire Hazards

Wood is flammable, and wood dusts may form explosive mixtures with air in the presence of an ignition source.

Hazardous Combustion Products

Hazardous decomposition products include irritating and toxic vapors and gases of arsenic compounds, chromium oxides and copper compounds.

Extinguishing Media

Use water to wet down wood and to reduce the likelihood of ignition or dispersion of dust into the air.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 1 **Fire:** 1 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

* * * Section 6 - Accidental Release Measures * * *

Containment Procedures

No containment procedures are needed, as this product cannot spill or leak the preservative. Keep away from sparks and flame.

Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Wet down accumulated dusts prior to sweeping or vacuuming in order to prevent explosion hazards. Sweep up or vacuum small pieces and dusts and place in appropriate container for disposal. Gather larger pieces by an appropriate method. Avoid the generation of airborne dusts during clean-up. Do not inhale dusts during cleanup.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate personal protective equipment. Follow all Local, State, Federal and Provincial regulations for disposal.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Do not generate airborne dusts in the presence of an ignition source when sawing, cutting or grinding wood. Wash hands after handling and before eating. Avoid contact of product or product dusts with skin and eyes. Do not breathe product dusts. Do not eat, drink or smoke when handling this material or in areas where dusts of this product are present.

Storage Procedures

Maintain good housekeeping procedures, such as sweeping regularly to avoid accumulation of dusts. Store product in a dry area away from excessive heat, sparks and open flame.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Exposure Guidelines

A: General Product Information

Follow all applicable exposure limits.

B: Component Exposure Limits

Wood/Wood dust (Not Available)

ACGIH:	5 mg/m3 TWA (related to Wood dust (soft wood))
	10 mg/m3 STEL (related to Wood dust (soft wood))
OSHA	5 mg/m3 TWA (related to Wood dust, all soft and hard woods, except western red cedar)
Vacated:	10 mg/m3 STEL (related to Wood dust, all soft and hard woods, except western red cedar)
NIOSH:	1 mg/m3 TWA (related to Wood dust)

Chromium (VI) trioxide (CrO3) (1333-82-0)

ACGIH:	0.5 mg/m3 TWA (related to Chromium metal)
OSHA	1 mg/m3 TWA (related to Chromium)
Vacated:	
OSHA Final:	1 mg/m3 TWA (related to Chromium)
NIOSH:	0.001 mg/m3 TWA (as Cr)

Arsenic acid (7778-39-4)

ACGIH:	0.01 mg/m3 TWA (related to Arsenic)
OSHA	5 µg/m3 Action Level (as As); 10 µg/m3 PEL (as As. Cancer hazard - see 29 CFR 1910.1018.
Vacated:	Arsine excepted) (related to Inorganic arsenic (compounds))
OSHA Final:	0.5 mg/m3 TWA (related to Arsenic)
NIOSH:	0.002 mg/m3 Ceiling (related to Arsenic metal)

Copper oxide (1317-38-0)

NIOSH:	0.1 mg/m3 TWA (fume)
	1 mg/m3 TWA (as Cu) (related to Copper compounds)

Engineering Controls

Use exhaust ventilation when cutting, grinding or sanding in enclosed areas and if it is anticipated the exposure limits for wood dust may be exceeded during working with this product.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields when handling, cutting, sanding or grinding this material. Use a face shield during processes that may generate excessive dusts and splinters.

Personal Protective Equipment: Skin

Wear puncture resistant work gloves, such as leather.

Personal Protective Equipment: Respiratory

Not normally needed. Use a dust mask for particulate concentrations exceeding the Occupational Exposure Limit.

Personal Protective Equipment: General

Launder contaminated clothing after use. Eye wash fountain and emergency showers are recommended.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Light to dark green	**Odor:**	No odor
Physical State:	Solid wood	**pH:**	Not applicable
Vapor Pressure:	Not available	**Vapor Density:**	Not applicable
Boiling Point:	Not applicable	**Melting Point:**	Not applicable
Solubility (H2O):	Insoluble	**Specific Gravity:**	Not available

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from excessive heat, sparks and open flame. Keep away from incompatible materials.

Incompatibility

This product may react with strong acids, strong bases, reducing agents, halogens, metals and water-reactive materials.

Hazardous Decomposition

Hazardous decomposition products include irritating and toxic vapors and gases of arsenic compounds, chromium oxides and copper compounds.

Hazardous Polymerization

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute and Chronic Toxicity

A: General Product Information

Wood dusts may be irritating to the eyes, skin and respiratory tract. Prolonged or repeated inhalation of wood dust may cause respiratory irritation, recurrent bronchitis and prolonged colds. Depending on the species of wood, recurrent exposure may cause allergic skin and respiratory reactions in some individuals.

Chromium III, the naturally occurring form, has low toxicity while chromium VI is highly toxic due to strong oxidation characteristics and permeability through biological membranes. Excessive exposure to chromium VI can produce allergic skin sensitization reactions and severe nasal irritation, scarring and damage to the lungs, liver and kidney damage.

Exposure to arsenic compounds results in hyperpigmentation of the skin and hyperkeratosis of the skin as well as dermatitis of both primary irritation and sensitization types. Acute inhalation has resulted in irritation of the upper respiratory tract, even leading to ulceration and perforation of the nasal septum. Symptoms of acute arsenic poisoning include burning lips, constriction of the throat, abdominal pain, severe nausea, projectile vomiting, and profuse diarrhea. Other toxic effects on the liver, blood-forming organs, central and peripheral nervous systems and cardiovascular system may appear.

B: Component Analysis - LD50/LC50

Chromium (VI) trioxide (CrO3) (1333-82-0)
Oral LD50 Rat: 80 mg/kg; Oral LD50 Mouse: 127 mg/kg
15 mg/m3 IDLH (as Cr(VI))

Arsenic acid (7778-39-4)
Oral LD50 Rat: 48 mg/kg
5 mg/m3 IDLH (related to Arsenic)

Copper oxide (1317-38-0)
Oral LD50 Rat: 470 mg/kg (related to Copper(I) oxide)
100 mg/m3 IDLH (fume, as Cu)
100 mg/m3 IDLH (dusts and mists, as Cu) (related to Copper compounds)

Carcinogenicity

A: General Product Information

Wood dust is classified as a human carcinogen or occupational carcinogen by ACGIH, NIOSH and IARC. This classification is based on an increased incidence of nasal and paranasal cancers in people exposed to wood dusts.

Chromium VI compounds have been strongly implicated in causation of human lung cancer. Elevated cancer risks have been noted mainly in persons manufacturing certain water-insoluble chromium VI pigments. Chromium trioxide may cause cancer of the respiratory tract.

Inorganic arsenic can produce lung, skin and lymphatic cancer with long term occupational exposure above the established limits.

B: Component Carcinogenicity

Wood/Wood dust (Not Available)

ACGIH: A1 - Confirmed Human Carcinogen (Beech and Oak) (related to Wood dust - hard wood)
NIOSH: potential occupational carcinogen (related to Wood dust)
NTP: Known Carcinogen (related to Wood dust) (Select Carcinogen)
IARC: Monograph 62, 1995 (related to Wood dust) (Group 1 (carcinogenic to humans))

Chromium (VI) trioxide (CrO3) (1333-82-0)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (related to Chromium metal)
NIOSH: potential occupational carcinogen
NTP: Known Carcinogen (Listed under 'Chromium hexavalent compounds') (Select Carcinogen)
IARC: Monograph 49, 1990 (Evaluated as a group) (related to Chromium (VI)) (Group 1 (carcinogenic to humans))

Arsenic acid (7778-39-4)

ACGIH: A1 - Confirmed Human Carcinogen (related to Arsenic)
OSHA: 5 µg/m3 Action Level (as As); 10 µg/m3 PEL (as As. Cancer hazard - see 29 CFR 1910.1018. Arsine excepted) (related to Inorganic arsenic (compounds))
NIOSH: potential occupational carcinogen (related to Arsenic metal)
NTP: Known Carcinogen (related to Arsenic, inorganic compounds) (Select Carcinogen)
IARC: Supplement 7, 1987; Monograph 23, 1980 (This evaluation applies to the group of compounds as a whole and not necessarily to all individual compounds within the group) (related to Arsenic) (Group 1 (carcinogenic to humans))

Mutagenicity

Chromium VI compounds have been mutagenic in bacteria, caused chromosome aberrations in mammalian cells and have been associated with increased frequencies of chromosome aberrations in lymphocytes in chromate workers.

Exposure to arsenic compounds has been reported to induce chromosomal breaks in cultured human leukocytes.

Teratogenicity

Chromium VI compounds have caused birth defects and affected fertility in laboratory animals.

Teratogenic effects of soluble arsenic compounds administered intravenously or intraperitoneally at high doses have been demonstrated in hamsters, rats and mice.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

This product is not expected to leach harmful amounts of preservative into the environment. However, the wood preservatives in this product can be extremely harmful to both terrestrial and aquatic plant or animal life.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Chromium (VI) trioxide (CrO3) (1333-82-0)

Test & Species		Conditions
96 Hr LC50 fathead minnow	36.2 mg/L	
96 Hr LC50 striped catfish	200 mg/L	
96 Hr LC50 rainbow trout	7.6 mg/L	related to Chromium (VI
24 Hr LC50 water flea	435 µg/L	related to Chromium (VI

Environmental Fate

No data available for this product.

* * * Section 13 - Disposal Considerations * * *

US EPA Waste Number & Descriptions

A: General Product Information

You must test your waste using methods described in 40 CFR Part 261 to determine if it meets applicable definitions of hazardous wastes.

Note: If discarded, this product as supplied would not be considered a hazardous waste according to 40CFR261.4(b)(9).

B: Component Waste Numbers

Chromium (VI) trioxide (CrO3) (1333-82-0)

RCRA: 5.0 mg/L regulatory level (related to Chromium)

Arsenic acid (7778-39-4)

RCRA: waste number P010
5.0 mg/L regulatory level (related to Arsenic)

Disposal Instructions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

* * * Section 14 - Transportation Information * * *

US DOT Information

Shipping Name: Not regulated
UN/NA #: None **Hazard Class:** None **Packing Group:** None
Required Label(s): None

Canada Transportation of Dangerous Goods Information

Shipping Name: Not regulated
UN/NA #: None **Hazard Class:** None **Packing Group:** None
Required Label(s): None

* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

This product is pressure treated with either of two FIFRA registered wood preservatives which fall under Environmental Protection Agency regulations.

EPA Registration No.: 10465-26 (CCA50%), 10465-28 (CCA60%)
EPA Est. No.: 10465-NC-2, 10356-GA-1, 10365-TX-1

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Chromium (VI) trioxide (CrO3) (1333-82-0)

SARA 313: 0.1 percent de minimis concentration (Chemical Category N090) (related to Chromium (VI) compounds)

Arsenic acid (7778-39-4)

SARA 313: 0.1 percent de minimis concentration (Chemical Category N020) (related to Arsenic, inorganic compounds)
CERCLA: 1 lb final RQ; 0.454 kg final RQ

Copper oxide (1317-38-0)

SARA 313: 1.0 percent de minimis concentration (does not include copper phthalocyanine compounds substituted only with hydrogen and/or bromine or chlorine, Chemical Category N100) (related to Copper compounds)

C: Federal Insecticide, Fungicide, and Rodenticide Act

This material contains the following chemicals present on either the Listing of Pesticide Chemicals (40 CFR 180) or Pesticides Classified for Restricted Use as listed by FIFRA :

Arsenic acid (7778-39-4)

FIFRA Section number 180.180

Copper oxide (1317-38-0)

FIFRA Section number 180.1021
Section number 180.1021 (related to Cuprous oxide)

SARA 311/312: Acute Health Yes **Chronic Health** Yes **Fire** Yes **Pressure** No **Reactive** No

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Wood/Wood dust ([1]related to Wood dust, all soft and hard woods) ([2]related to Wood dusts-soft woods)	Not Available	No	No	Yes [1]	No	Yes [2]	Yes [1]
Chromium (VI) trioxide (CrO3) ([1]related to Chromium) ([2]related to Chromium metal)	1333-82-0	Yes [1]	Yes	Yes [2]	Yes	Yes	Yes
Arsenic acid ([1]related to Arsenic)	7778-39-4	Yes [1]	Yes	Yes [1]	Yes	Yes	Yes [1]
Copper oxide ([1]related to Copper compounds)	1317-38-0	Yes [1]	No	No	No	No	No

Canadian WHMIS Information

A: General Product Information

All components are on the Canadian Domestic Substances or Non-Domestic Substances Inventory Lists.

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Chromium (VI) trioxide (CrO3)	1333-82-0	0.1 % (English Item 401, French Item 1305)
Arsenic acid	7778-39-4	0.1 % (English Item 129, French Item 65)
Copper oxide	1317-38-0	1 % (English Item 437, French Item 1307) (related to Copper(I) oxide) 1 % (English Item 431, French Item 577) (related to Copper compounds, n.o.s.)

WHMIS Classification: D2A, D2B

Additional Regulatory Information

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List.

B: Component Analysis - Inventory

Component	CAS #	TSCA	DSL	NDSL	EINECS	AUST	MITI	PHIL	KOREA	CHINA
Chromium (VI) trioxide (CrO3)	1333-82-0	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Arsenic acid	7778-39-4	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Copper oxide	1317-38-0	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

* * * Section 16 - Other Information * * *

Other Information

Disclaimer: Supplier gives no warranty of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser will make his own tests to determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental and/or consequential property damage arising out of the use of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights. Read the Material Safety Data Sheet before handling product.

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists. AICS = Australian Inventory of Chemical Substances. CAS = Chemical Abstract Service. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. CHEMTREC = Chemical Transportation Emergency Center. DSL = Canadian Domestic Substance List. EINECS = European Inventory of New and Existing Chemical Substances. ELINCS = European List of Notified Chemical Substances. EPA = Environmental Protection Agency. HEPA = High Efficiency Particulate Air. HMIS = Hazardous Material Information System. IARC = International Agency for Research on Cancer. IDLH = Immediately Dangerous to Life and Health. MITI = Japanese Ministry of International Trade and Industry. NDSL = Canadian Non-Domestic Substance List. NFPA = National Fire Protection Association. NIOSH = National Institute of Occupational Safety and Health. NJTSR = New Jersey Trade Secret Registry. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. NA = Not available or Not Applicable. SARA = Superfund Amendments and Reauthorization Act. TDG = Transportation of Dangerous Goods. TLV = Threshold Limit Value. TSCA = Toxic Substances Control Act. WHMIS = Workplace Hazardous Materials Information System.

This is the end of MSDS # CSI-048