Material Safety Data Sheet  
Material Name: ACQ Preserve and Preserve Plus Pressure Treated Wood  
ID: CSI-010

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

Chemical Name: Pressure treated wood with Alkaline Copper and Quaternary Ammonium Compounds  
Product Use: Lumber  
Manufacturer Information

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 ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Available</td>
<td>Wood/Wood dust</td>
<td>90-98.5</td>
</tr>
<tr>
<td>141-43-5</td>
<td>Monoethanolamine</td>
<td>0.8-5.5</td>
</tr>
<tr>
<td>Proprietary</td>
<td>Copper complex expressed as Copper oxides</td>
<td>0.3-2.1</td>
</tr>
<tr>
<td>10043-35-3</td>
<td>Boric acid</td>
<td>0.2-1.2</td>
</tr>
<tr>
<td>68391-01-5</td>
<td>Alkyl dimethyl benzyl ammonium chloride**</td>
<td>0.0-1.0</td>
</tr>
<tr>
<td>7173-51-5</td>
<td>Didecyl dimethyl ammonium chloride**</td>
<td>0.0-1.0</td>
</tr>
</tbody>
</table>

**Note: This product contains either one or the other of the above Quaternary ammonium compounds depending on which ACQ Wood Preservative is used.

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, Copper (7440-50-8), Copper compounds, n.o.s..

Component Information/Information on Non-Hazardous Components
ACQ Preserve Pressure Treated Wood products are made up of wood treated with one of the ACQ family of EPA registered products.

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

*** Section 3 - Hazards Identification ***

Emergency Overview
WARNING! Wood dust may form explosive mixture with air. Wood dusts may cause irritation to the eyes, skin and respiratory tract.

Potential Health Effects: Eyes
Wood dust may cause irritation to the eyes. Symptoms can include irritation, redness, scratching of the cornea, and tearing.

Potential Health Effects: Skin
Wood dust may cause irritation to the skin. Mechanical rubbing may increase skin irritation. Some wood species may cause dermatitis or allergic skin reactions in sensitized individuals.
Potential Health Effects: Ingestion
Ingestion of wood or wood 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
Wood 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 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 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 Reactivity: 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 wood 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: Combustible
Rate of Burning: Not available

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

Hazardous Combustion Products
Combustion products may yield irritating and toxic fumes and gases including organic chloride, aldehydes, amines, hydrogen chloride, ammonia, copper compounds, oxygen, boric oxide, oxides of carbon and nitrogen.

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 cleanup. 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 wood dusts with skin and eyes. Do not breathe
wood 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 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
ACGIH: (5 mg/m3) TWA (related to Wood dust (soft wood))
(10 mg/m3) STEL (related to Wood dust (soft wood))

OSHA
Vacated: 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; NIOSH Potential Occupational Carcinogen - see Appendix A (related to Wood
dust)

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 work clothes frequently. Eye wash fountain is recommended.
** *** Section 9 - Physical & Chemical Properties *** **

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>May vary</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid wood</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Odor</td>
<td>Ammoniacal/Wood Odor</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

** *** 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
Strong acids, alkalies and oxidizing agents.

Hazardous Decomposition
Combustion products may yield irritating and toxic fumes and gases including organic chloride, aldehydes, amines, hydrogen chloride, ammonia, copper compounds, oxygen, boric oxide, oxides of carbon and nitrogen.

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.

B: Component Analysis - LD50/LC50

** Monoethanolamine (141-43-5)**
- Oral LD50 Rat : 1720 mg/kg
- Oral LD50 Mouse : 700 mg/kg
- Dermal LD50 Rabbit : 1 mL/kg
- 30 ppm IDLH

** Copper complex (Proprietary)**
dusts or mists as Cu: 100 mg/m3 IDLH (related to Copper)

** Boric acid (10043-35-3)**
- Oral LD50 Rat : 2660 mg/kg
- Oral LD50 Mouse : 3450 mg/kg

** Didecyl dimethyl ammonium chloride** (7173-51-5)
- Oral LD50 Rat : 84 mg/kg
- Oral LD50 Mouse : 268 mg/kg

** Alkyl dimethyl benzyl ammonium chloride (68391-01-5)**
- Oral LD50 (no species indicated): 735 mg/kg for males and females combined
- Dermal LD50 (no species indicated): 3350 mg/kg for males and females combined
Carcinogenicity

A: General Product Information
ACQ Preserve pressure treated wood and its components are not listed as carcinogens by ACGIH, NIOSH, or IARC. 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.

B: Component Carcinogenicity
Wood/Wood dust (Not Available)
- ACGIH: A1 - Confirmed Human Carcinogen (related to Wood dusts-hard wood)
- NIOSH: Occupational carcinogen (related to Wood dust)
- IARC: Monograph 62, 1995 (related to Wood dust) (Group 1 (carcinogenic to humans))

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 contain fungicides and insecticides which when released into the environment, are expected to adversely effect or destroy contaminated plants. They may be harmful or fatal to wildlife.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Monoethanolamine (141-43-5)
- Test & Species
  - LC50 (96 hr) goldfish: 170.0 mg/L
  - EC50 (30 min) Photobacterium phosphoreum: 13.7 mg/L Microtox test.

Copper complex (Proprietary)
- Test & Species
  - LC50 (96 hr) fathead minnow: 23 ug/L
  - LC50 (96 hr) rainbow trout: 13.8 ug/L
  - LC50 (96 hr) bluegill: 236 - 892 ug/L
  - LC50 (72 hr) freshwater algae (Scenedesmus subspicatus): 120 ug/L (related to Copper)
  - LC50 (96 hr) water flea: 10 ug/L
  - LC50 (96 hr) water flea: 200 ug/L

Boric acid (10043-35-3)
- Test & Species
  - LC50 (48 hr) water flea: 115.0-153.0 mg/L

Environmental Fate
No information available.
*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

Although no EPA Waste Numbers are applicable for this product's components, you must test your waste to determine if it meets applicable definitions of hazardous waste and for State requirements. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

*** Section 14 - Transportation Information ***

US DOT Information

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

Canada Transportation of Dangerous Goods Information

Shipping Name: Not regulated
Hazard Class: None
UN/NA #: 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 three FIFRA registered wood preservatives which fall under Environmental Protection Agency regulations.

ACQ 2100 is registered with the EPA under registration number 10465-37.
ACQ 2101 is registered with the EPA under registration number 10465-40
ACQ 2102 is registered with the EPA under registration number 10465-39.

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).

Copper complex expressed as Copper oxides (Proprietary)

SARA 313: form R reporting required for 1.0% de minimis concentration (related to Copper)
form R reporting required for 1.0% de minimis concentration; Chemical Category N100; (does not include copper phthalocyanine compounds substituted only with hydrogen and/or bromine or chlorine) (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:

Copper complex (Proprietary)
FIFRA Section number 180.538 (related to copper)
D. Marine Pollutant

DOT  This material contains one or more of the following chemicals required by USDOT to be identified as marine pollutants.

Copper Complex (proprietary)

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:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>CA</th>
<th>FL</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood/Wood dust (¹related to Wood dust, all soft and hard woods) (²related to Wood dusts-soft woods)</td>
<td>Not Available</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes¹</td>
<td>No</td>
<td>Yes²</td>
</tr>
<tr>
<td>Monoethanolamine</td>
<td>141-43-5</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Copper complex (¹related to Copper)</td>
<td>Proprietary</td>
<td>Yes¹</td>
<td>Yes¹</td>
<td>Yes¹</td>
<td>Yes¹</td>
<td>Yes¹</td>
<td>Yes¹</td>
</tr>
</tbody>
</table>

Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monoethanolamine</td>
<td>141-43-5</td>
<td>1%; English Item 1096; French Item 1170</td>
</tr>
<tr>
<td>Copper complex</td>
<td>Proprietary</td>
<td>1%; English Item 433; French Item 578 (related to Copper, elemental) 1%; English Item 431; French Item 577 (related to Copper compounds, n.o.s.)</td>
</tr>
<tr>
<td>Boric acid</td>
<td>10043-35-3</td>
<td>1%; English Item 204; French Item 67</td>
</tr>
</tbody>
</table>

WHMIS Classification: D2A, D2B

Additional Regulatory Information

A: General Product Information
All components are on the U.S. EPA TSCA Inventory List. All components are on the Canadian Domestic Substances or Non-Domestic Substances Inventory Lists. The component, Copper complex expressed as copper oxides, which is not listed on the Canadian Domestic Substances List is on the Canadian Non-Domestic Substances Inventory List.
B: Component Analysis - Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>AUST</th>
<th>MITI</th>
<th>PHIL</th>
<th>KOREA</th>
<th>ELINCS</th>
<th>CHINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monoethanolamine</td>
<td>141-43-5</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Copper complex</td>
<td>Proprietary</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Boric acid</td>
<td>10043-35-3</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride**</td>
<td>7173-51-5</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride**</td>
<td>68391-01-5</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*** Section 16 - Other Information ***

Other Information

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


This is the end of MSDS # CSI-010