Long Life Treated Wood, Inc.

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MATERIAL SAFETY DATA SHEET for

WOLMANIZED® TREATED WOOD

prepared on 11/12/98

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1. Chemical Product and Company Identification:

Product Identifier: WOLMANIZED® TREATED WOOD & LUMBER

Use: Treated Wood Products

Company Contact Info: Long Life Treated Wood Inc. 410.543.0700 800.451.3137

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2. Composition/Information on Ingestion:

INGREDIENTS	CAS NUMBER	PERCENT	OSHA-PEL	ACGIH-TLV	ACGIH-STEL	EXPOSURE LIMIT (mg/m3)
Chromium III	7440-47-3	<2** (as Cr)	0.5	.05		
Arsenic Pentoxide	7440-38-2	<2** (as As)	0.01	0.01		
Copper	7440-50-8	<2** (as Cu)	1.0	1.0		
Wood Dust*			15.0 (softwood)	5.0 Softwood	15.0 STEL	

** A state-run OSHA program may have more stringent limits for wood dust. Please contact*

your state for further details.

*** Based on wood retention of 0.6 pounds CCA per cubic foot of wood. Actual retention percentage may vary slightly due to differences in wood stock and treatment levels.*

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3. Hazards Identification:

Inhalation:

Airborne treated or untreated wood dust may cause nose, throat or lug irritation. Various species of untreated wood dust can elicit allergic respiratory response in sensitized persons.

Eye Contact:

Treated or untreated wood dust may cause mechanical irritation.

Skin Contact:

handling wood may result in skin exposure to splinters. Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation. Various species of untreated wood dust can elicit allergic respiratory response in sensitized persons.

Ingestion:

Not anticipated to occur. A single ingestion of a very large amount of treated wood dust may require immediate medical attention.

Chronic Wood Dust (treated or untreated) Effects:

Wood dust, depending on species, may cause dermatitis on prolonged, repetitive contact, may cause respiratory sensitization and/or irritation.

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4. First Aid Measures:

Inhalation:

Remove from wood dust exposure. If breathing has stopped administer artificial respiration. Seek medical aid if symptoms persist.

Eye Contact:

DO NOT RUB THE EYES! Gently flush any particles from the eyes with large amounts of water for at least 15 minutes.

Skin Contact:

Rinse wood dust off with water. DO NOT RUB! Once the skin is free of the wood dust, wash thoroughly with soap and water.

Ingestion:

Rinse the victim's mouth out with water. Induce vomiting if directed by a physician or Poison Control Center. One ounce of treated wood dust per 10 pounds of body weight ingested my cause acute arsenic intoxication.

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5. Fire Fighting Measures:

Flash Point .....NA

Auto-ignition...NA

Lower Explosive Limit...NA

Upper Explosive Limit....NA

Extinguishing Agents:

Use water, dry chemical, or other common extinguishing media.

Fire-Fighting Procedures:

Fire from a separate fuel source may be intense enough to cause thermal decomposition releasing harmful fumes and/or gases. Wear complete fire service protective equipment, including full-face National Institute of Occupational Safety and Health (NIOSH) - approved self-contained Breathing apparatus.

Fire and Explosion Hazard:

High airborne levels of wood dust may burn rapidly in the air when exposed to an ignition source.

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6. Accidental Release Measures:

Spill or Leak Procedures (Product): NA

Waste Disposal:

Dispose of waste in accordance with local, state and federal regulations. Burning of treated wood or lumber is prohibited.

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7. Handling and Storage:

Storage Conditions:

Protect from physical damage. Maintain god housekeeping.

Caution:

Do not burn treated wood. Whenever possible, sawing or machining treated or untreated wood should be performed outdoors to avoid accumulations of airborne wood dust.

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8. Exposure Control/Personal Protection

Respiratory Protection:

Not required under normal use conditions. When sawing or cutting treated or untreated wood, wear a NIOSH approved dust mask.

Eye Protection:

Wear safety glasses with side shields or safety goggles when sawing or cutting.

Skin/Foot Protection:

Leather or fabric gloves, long sleeve shirt, pants and steel toed shoes when handling wood.

Ventilation:

Saw, cut or machine wood outdoors or in well ventilated areas. Ventilation should be sufficient to maintain inhalation exposures below OSHA PEL for particulates.

Hearing Protection:

Wear ear plugs or muffs when using power tools.

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9. Physical and Chemical Properties:

Appearance.....Slightly green-colored

Odor.....None

Solubility in Water.....Insoluble

Physical State.....Solid

pH.....NA

Specific Gravity .....NA

Boiling Point.....NA

Vapor Density.....NA

Vapor Pressure.....NA

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10. Stability and Reactivity

Conditions contributing to Instability:

None known

Incompatibilities:

Strong acids, open flame and oxidizers.

Hazardous Reactions/Decompositions/Combustion Products

Contact with strong acid may release metals. Combustion products may include smoke. oxides of carbon and nitrogen, chrome, copper and arsenic. The metals may remain in the ash if wood is burned.

Hazardous Polymerization:

Does not occur

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11. Toxicological Information

Study Abstracts:

In Hawaii, where over 45,000 homes have been built almost entirely of CCA-treated wood, a study was conducted by the Pacific Biomedical Center of the University of Hawaii (the Budy-Rashad study) in 1977 to determine any possible effect on the heath of carpenters. The study concluded that exposure to CCA-treated sawdust is not associated with increased risk of total cancer, lung cancer of lymphatic cancer and shows that excess reparatory cancer mortality was not observed in the carpenters.

A study was conducted by the University of Alabama to evaluate the teratogenicity of CCA-impregnated sawdust when exposed to rabbits and mice. Sawdust from CCA-treated wood has been shown not to cause chromosome damage or teratogenicity in mice fed sawdust nor to cause birth defects in rabbits receiving sawdust applied to their skin.

A series of reports released in 1990 from the Consumer Product Safety Commission (CPSC) assessed the risk of cancer to children playing on CCA-treated wood playground equipment. Seven playground equipment samples were collected. The results of the study indicated the approximate risk of cancer from five samples was less than one in a million, a risk considered negligible. The remaining two samples yielded estimated risks of 3-4 million, also considered by CPSC to be a small risk.

Carcinogenic status:

IARC, the NTP, OSHA and California Proposition 65 do not consistently distinguish among arsenic or chrome species but list

inorganic arsenic and chromium and certain chromium compounds as human carcinogens. Cancers in humans have followed from long term consumption f Fowler's Solution, a medicinal trivalent arsenical; inhalations and skin contact with inorganic trivalent arsenical sheep-dust; the combined inhalation of arsenic trioxide (trivalent arsenical), sulfur dioxide, and other particulates from ore smelting in arsenic trioxide production; and occupational exposure to non-water-soluble hexavalent chromium.

IARC has classified untreated wood dust as a Group I human carcinogen.

WARNING: This wood contains chemicals known to the State of California to cause cancer, birth defects of other reproductive harm. (This statement issued in accordance with California Proposition 65).

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12. Ecological Information

Study Abstracts:

A technical paper published in the Forest Products Journal (September, 1974) by Levi, Huisingh and Nesbitt described a study conducted to determine if CCA wood preservative in grapevine support posts might be absorbed by the vines, leaves and/or grapes. This study concluded that "...CCA preservatives are bound in the wood, are not readily leached and are not concentrated in plants growing close to the treated wood."

The Springborn Laboratories Environmental Sciences Division in 1993 conducted a sediment exposure study using leachate from CCA treated and untreated marine pilings and exposing Ampelisca abdita for a period of 10 days. Survival of the organisms during the 10-day exposure period was the biological endpoint used to establish the effects of exposure. Results indicated that leachate from treated pilings had no adverse effect on organism survival. It was concluded that the primary constituent of the CCA-treated wood pilings were not present in the leachate at concentrations which would adversely affect the survival of the organisms.

Hickson Corporation conducted test to evaluate treated wood used in raised vegetable gardens. Vegetables harvested from gardens in raised bed structures built of CCA-treated wood were compared with vegetables grown in untreated raised bed structures and with vegetables purchased at a local grocery store. Testing revealed that all vegetables contained minuscule amounts of each element in CCA. In some cases, the levels of metals were actually higher in the vegetables grown in untreated bins, and in one case the store-purchased vegetable had the highest level of arsenic. The report concluded that there was "no uptake of the metal constituent into the vegetables."

The Food and Drug Administration's (FDA) "Market Basket Survey" has consistently shown that arsenic in tomatoes is below the analytical level of detection despite the increased usage of arsenicaly-treated wood for tomato stakes. Moreover,

even though CCA-treated wood has bee increasingly used in application such as cattle bunks and stalls and poultry brooders for the last ten years, the FDA survey has shown a decrease in the arsenic content of dairy, meat and poultry products.

A study funded in part by the National Oceanic and Atmospheric Administration (NOAA) and prepared by the Marine Resources Division of the South Carolina Department of Natural Resources in 1005 measured the impact of wood preservative leachate from docks in and estuarine environment. Copper, chromium, arsenic, and polynuclear aromatic hydrocarbons (PAHs) were measured in composite sample of sediments and naturally occurring oyster populations from creeks with high densities of docs, and from nearby reference creeks with no docks. Sediments from all by one site had metal and total PAH concentrations which were below levels reported to cause biological effects, and the oysters showed no significant difference in their physiological condition. Bioassays were also conducted on four common estuarine species and hatchery-reared oysters. The results suggest that wood preservative leachates from dock pilings have no acutely toxic effects on these common species, nor do they affect the survival or growth of juvenile oysters over a six-week period. In some cases, metal leachates my accumulate in sediments and oysters immediately adjacent to pilings, but do not appear to become concentrated in sediments or oysters elsewhere in the same creeks.

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13. Disposal Considerations

Disposal Guidance:

Do not burn treated wood. Dispose of in accordance with local, state and federal regulations. This product is exempted as a hazardous waste under any sections of the Rosource Conservation and Recovery Act (RCRA) regulations as long as the product is being utilized for its intended end use as stated in 40 CFR 261.4 (b) (9). State-run hazardous waste regulations may be more stringent than the federal requirements.

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14. Transport Information

DOT Hazardous Material Classification:

This material is NOT regulated as a hazardous material by the Department of Transportation (DOT).

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15. Regulatory Information

CERCLA/SARA (40 DRF 302.4, 370, 372)

If the wood products are treated with levels of preservative not typically used in

consumer products, the the wood products in storage must be counted in the threshold determination as required under Sections 311 and 312 of EPCRA. SARA Section 313 chemicals; Arsenic, Chromium and Copper compounds

RCRA:

This product is exempted as a hazardous waste under any sections of the Resource Conservation and Recovery Act (RCRA) regulations as long as the product is being utilized for its intended use as stated in 40 CRG261.4 (b) (9).

OSHA (29 CFR 1910.1200)

This product is regulated under the Hazard Communication Standard

OSHA - Occupational Safety and Health Administration

ACGIH - American Conference of Governmental Industrial Hygienists

PEL - Permissible Exposure Limit

TLV - Threshold Limit Value

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16. Other Information

Refer to the Consumer Information Sheet (CIS) for additional information on this product.

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Hickson Corporation makes no guarantee or warranty, expressed or implied, as to the accuracy, reliability, or completeness of the information.