

Osmose MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET: **LifeWood® Treated Wood**

SECTION I

MSDS NUMBER:	254-osm
MSDS CODE:	OSM
SYNONYMS:	N/A
MANUFACTURED BY:	Licensees/Customers of Osmose, Inc.
DIVISION:	WPD
EPA REGISTRATION NUMBER:	N/A
EMERGENCY PHONE:	716-882-5905
OTHER CALLS:	770-233-4200
ADDRESS:	980 Ellicott Street, Buffalo, NY 14209
MSDS PREPARED BY:	Teri Muchow
DATE PREPARED:	June 17, 2008
DATE LAST REVISED:	December 2, 2010 (replaces September 14, 2010)

IMPORTANT INFORMATION

- Do Not Burn Preserved Wood
- Do Not Use Preserved Wood As Mulch
- Treated Or Untreated Wood Dust May Cause Eye, Skin & Respiratory Irritation
- Some Untreated Wood Species May Cause Allergic Skin Or Respiratory Effects In Sensitized Individuals
- Wear Dust Mask & Goggles When Cutting Or Sanding Wood
- Wear Gloves When Working With Wood
- Prolonged Contact with Treated Wood During Construction or Use May Cause Skin Irritation
- Some Preservative May Migrate Into The Soil/Water Or Dislodge From Wood
- For Additional Information Visit www.osmosewood.com

SECTION II – HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

TRADE NAME: LifeWood® Treated Wood	CAS	OSHA PEL/TWA	ACGIH TLV/TWA	%
INGREDIENT NAME Wood/Wood Dust (<i>This represents the maximum amount of wood dust that could be generated if the wood was completely machined. Exposure limits are for all species except western red cedar, which has a TLV of 0.5 mg/m³</i>)	N/A	15 mg/m ³ (Total Dust) 5 mg/m ³ (Respirable dust)	1 mg/m ³ (Inhalable)	> 90%
Copper Carbonate expressed as elemental copper	12069-69-1	0.1 mg/m ³ TWA (Cu fume)	0.2 mg/m ³ TWA (Cu fume)	< 1.0%
Tebuconazole	107534-96-3	None Established	None Established	< 0.05%
Depending on the additives applied to the treating solution, this wood may also contain < 1% of a mold inhibitor, <1% of a non-hazardous wax emulsion and/or <1% of a colorant. None of these ingredients are classified as carcinogens.				

PERCENTAGE OF ACTIVE INGREDIENTS PER RETENTION LEVEL

	0.06 pcf	0.15 pcf	0.23 pcf
Copper carbonate expressed as Elemental Copper	0.15% - 0.25%	0.35% - 0.65%	0.55% - 0.95%
Tebuconazole	0.006% - 0.01%	0.01% - 0.03%	0.02% - 0.05%

SECTION III - CHEMICAL CHARACTERISTICS

BOILING POINT	MELTING POINT	FREEZING POINT	SPECIFIC GRAVITY (H ₂ O = 1)	PERCENT VOLATILE BY VOLUME	THEORETICAL VOC CONTENT (PERCENT OF WEIGHT)
Not Applicable	Not Applicable	Not Applicable	Not Available	Not Applicable	Not Applicable
WEIGHT PER GALLON	pH:	VAPOR PRESSURE	VAPOR DENSITY	DENSITY	EVAPORATION RATE BASIS (N-BUAC) = 1
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Available	Not Applicable
SOLUBILITY IN WATER: Not Applicable			REACTIVITY IN WATER: Not Applicable		
APPEARANCE AND ODOR: Solid Wood, appearance may vary. No odor.					

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	METHOD	FLAMMABLE LIMITS IN AIR (%)	AUTOIGNITION TEMPERATURE
N/A	N/A	N/A	N/A
NFPA CODES	HEALTH	1	HMIS CODES:
	FLAMMABILITY	1	HEALTH
	REACTIVITY	0	FLAMMABILITY
	OTHER	N/A	REACTIVITY
			PROTECTION
EXTINGUISHER MEDIA: Use water to wet down wood and to reduce the likelihood of ignition or dispersion of dust into the air.			

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear full protective clothing including self-contained breathing apparatus. Combustion products may yield irritating and toxic fumes and gases.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Wood is combustible, and wood dusts may form explosive mixtures with air in the presence of an ignition source.

SECTION V - REACTIVITY DATA

IS THIS CHEMICAL STABLE UNDER NORMAL CONDITIONS OF HANDLING/STORAGE (Y/N)? Yes

CONDITIONS TO AVOID (REGARDING STABILITY): Keep away from excessive heat, sparks and open flame. Keep away from incompatible materials.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizing or reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products may yield irritating and toxic vapors/fumes of organic materials, and oxides of carbon and nitrogen.

HAZARDOUS POLYMERIZATION POSSIBLE (Y/N)? No

CONDITIONS TO AVOID (REGARDING POLYMERIZATION): N/A

SECTION VI - HEALTH HAZARDS

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

ROUTES OF ENTRY: Dermal, Inhalation.

SIGNS AND SYMPTOMS OF ACUTE OVEREXPOSURE:

EYES:	Contact with wood and/or wood dust may cause irritation to the eyes. Symptoms can include irritation, redness, scratching of the cornea, and tearing.
SKIN:	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.
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.
INHALATION:	Wood dust, treated or untreated, 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 dusts by inhalation has been reported to be associated with nasal and paranasal cancer.

CHRONIC OVEREXPOSURE: Prolonged exposure to wood dusts by inhalation has been reported to be associated with nasal and paranasal cancer. Some wood species may cause dermatitis or allergic skin reactions in sensitized individuals.

CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?: LifeWood Treated Wood and its components are not listed as carcinogens by ACGIH, NIOSH, or IARC. Tebuconazole, a component of LifeWood, has been classified by EPA as a possible human carcinogen. ACGIH, NIOSH and IARC classify wood dust as a human carcinogen or occupational carcinogen. This classification is based on an increased incidence of nasal and paranasal cancers in people exposed to wood dusts.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Pre-existing eye, respiratory system and skin conditions.

TOXICITY: Acute toxicity testing has not been performed on the treated wood.

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EMERGENCY AND FIRST AID PROCEDURES



EMERGENCY PHONE NUMBER OF MANUFACTURER: 716-882-5905

- 1. INHALATION:** If dusts are inhaled, remove person to fresh air. If symptoms persist, get medical attention.
- 2. EYE CONTACT:** Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if symptoms persist.
- 3. SKIN CONTACT:** 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.
- 4. INGESTION:** If the material is swallowed, get immediate medical attention or advice – Do not induce vomiting.

NOTE TO PHYSICIAN: Respiratory ailments and pre-existing skin conditions may be aggravated by exposure to wood dust.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

US DOT SHIPPING DESCRIPTION: Not regulated.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Avoid working with freshly treated wet wood. If not possible, wear long sleeve shirt, long pants and gloves when working with freshly treated wet wood. Clothing should be removed and replaced if it becomes wet due to contact with freshly treated wood. Avoid contact of wood and wood dusts with skin and eyes. Avoid inhalation of airborne contaminants as a result of cutting or sawing treated wood. Do not eat, drink or smoke when handling this material or in areas where dusts of this product are present.

OTHER PRECAUTIONS: 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. Maintain good housekeeping procedures, such as sweeping regularly to avoid accumulation of dusts. Store away from excessive heat, sparks and open flame.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: No containment procedures are needed as this product cannot spill or leak the preservative. Keep away from sparks and flame. 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. To avoid inhalation of dusts during clean up, a dust mask is recommended.

WASTE DISPOSAL METHODS: 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 and Federal regulations.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION: Wear a dust mask when cutting, grinding or sanding wood and when cleaning up wood dust.

VENTILATION REQUIREMENTS: Provide good ventilation when cutting, grinding or sanding wood. Whenever possible these operations should be performed outdoors.

PROTECTIVE GLOVES: Wear chemical resistant (rubber, neoprene or nitrile) gloves when handling freshly treated wood at the treating plant. Otherwise, wear puncture resistant work gloves, such as leather.

EYE PROTECTION: 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.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Eye wash fountain is recommended.

WORK/HYGIENIC PRACTICES: Launder work clothes frequently.

SECTION IX – ECOLOGICAL INFORMATION

ECOTOXICITY: This product is not expected to leach harmful amounts of preservative into the environment.

ENVIRONMENTAL FATE: No information available

SECTION X - REGULATORY INFORMATION:

SECTION 302:

N/A

SECTION 304:

N/A

SARA/TITLE III ;SECTION 312 - HAZARD CATEGORIES:

Immediate (Acute) Health: No	Reactive Hazard: No
Delayed (Chronic) Health: No	Sudden Release of Pressure: No
Fire Hazard: No	

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SARA/SECTION 313 SUPPLIER NOTIFICATION:

This product contains a chemical which is either listed in Section 313 or is included in a chemical category listed in Section 313. The following listed chemical is present:



































- Copper Carbonate (CAS #12069-69-1) as a Copper Compound

For percent of copper carbonate in the product, refer to the PERCENTAGE OF ACTIVE INGREDIENTS PER RETENTION LEVEL table in Section II of the MSDS. According to 40 CFR 372.65(c)(5)(d), "Notifications are not required in the following instances: (1) If a mixture or trade name product contains no toxic chemical in excess of the applicable de minimis concentration as specified in 372.38(a)." If you refer to this section, it describes de minimis concentrations as "the toxic chemical is in a concentration in the mixture which is below 1 percent of the mixture." **As the copper oxide levels in LifeWood® Treated Wood are below 1% the Supplier Notification is not required for wood treated at these retentions.**

CALIFORNIA PROPOSITION 65:

WARNING: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. CALIFORNIA HEALTH AND SAFETY CODE - SECTION 25249.6.

HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS) PERSONAL PROTECTION INDEX

A 	H  +  +  + 
B  + 	I  +  + 
C  +  + 	J  +  +  + 
D  +  + 	K  +  +  + 
E  +  + 	X Ask your supervisor for guidance
F  +  +  + 	
G  +  + 	

N/A = Not Applicable

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