

FOR ANY EMERGENCY, 24 HOURS / 7 DAYS, CALL:

FOR ALL MSDS QUESTIONS & REQUESTS, CALL:

PRODUCT NAME: Wolmanized® Outdoor® Wood + Tantone 3960 CN

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE: 03/24/2014
 SUPERCEDES: 09/21/2009
 MSDS Number: 000000023455
 SYNONYMS: None
 CHEMICAL FAMILY: None
 DESCRIPTION / USE: Treated Wood Products
 FORMULA: None established

SECTION 2. HAZARDS IDENTIFICATION

OSHA Hazard Classification:	Wood dust is classified as: carcinogenic, possible sensitizer, mild skin irritant, possible respiratory irritant., WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING)
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Routes of Entry: Inhalation, skin, eyes, ingestion
 Chemical Interactions: No known or reported interactions.
 Medical Conditions Aggravated: Inhalation of the dust from this material at concentrations above the TLV can aggravate pre-existing upper respiratory and lung diseases such as bronchitis, emphysema and asthma., Skin diseases including eczema and sensitization

Human Threshold Response Data

Odor Threshold Not established for product.

Ethanolamine 2.6 ppm

Irritation Threshold Not established for product.

Ethanolamine > 5.0 ppm

Hazardous Materials Identification System / National Fire Protection Association Classifications

<u>Hazard Ratings :</u>	<u>Health</u>	<u>Flammability</u>	<u>Physical / Instability</u>	<u>PPI / Special hazard.</u>
HMIS	2*	1	0	
NFPA	2	1	0	

Immediate (Acute) Health Effects

Inhalation Toxicity: Airborne treated or untreated wood dust may cause nose, throat or lung irritation.

Skin Toxicity: Handling of wood may result in skin exposure to splinters. Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation.

Eye Toxicity: Treated or untreated wood dust may cause mechanical irritation.

Ingestion Toxicity: Not expected to be a route of exposure in normal industrial use.

Acute Target Organ Toxicity: Skin, Eyes, Respiratory Tract

Prolonged (Chronic) Health Effects

Carcinogenicity: IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group 1 human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Inhalation: May cause respiratory sensitization and/or irritation.

Skin Contact: Treated or untreated wood dust, depending on the species, may cause dermatitis on prolonged, repetitive contact.

Ingestion: Not expected to be a route of exposure in normal industrial use.

Sensitization: Various species of untreated wood dust can elicit an allergic respiratory response in sensitized persons. Various species of untreated wood dust can elicit an allergic type skin irritation in sensitized persons.

Chronic Target Organ Toxicity: Respiratory Tract, Skin, Eyes

Supplemental Health Hazard Information : No additional health information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS OR CHEMICAL NAME</u>	<u>CAS #</u>	<u>% RANGE</u>
COPPER COMPOUNDS	MIXTURE	0.1 - 2.0
Ethanolamine	141-43-5	
Wood Dust	Not Assigned	88 - 99.5
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.)	7664-41-7	0 - 1
Formaldehyde (by-product of the untreated plywood article)	50-00-0 (Only applies to plywood products)	0 - <= 0.1

SECTION 4. FIRST AID MEASURES

Inhalation: IF INHALED: Remove individual to fresh air. Seek medical attention if breathing becomes difficult or if respiratory irritation develops. If not breathing, give artificial respiration. Call for medical assistance.

Skin Contact: IF ON SKIN: Flush skin with water for 15 minutes. Take off all contaminated clothing. Seek medical attention if irritation develops.

Eye Contact: IF IN EYES: Flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

Ingestion: IF SWALLOWED: Immediately drink water to dilute. Seek medical attention if symptoms develop. Never give anything by mouth to an unconscious person.

SECTION 5. FIREFIGHTING MEASURES

Flammability Summary (OSHA): Product is not known to be flammable, combustible or pyrophoric.

Flammable Properties

Flash Point: No data.

Autoignition Temperature: No data.

Fire / Explosion Hazards: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Extinguishing Media: Water spray

Fire Fighting Instructions: In case of fire, use normal fire-fighting equipment and the personal protective equipment recommended in Section 8 to include a NIOSH approved self-contained breathing apparatus.

Hazardous Combustion Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion., Hazardous combustion/decomposition products may include but are not limited to:, Copper metal and copper oxides, Copper Fumes

Upper Flammable / Explosive Limit, % in air: No data.

Lower Flammable / Explosive Limit, % in air: No data.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Protection for Emergency Situations: No extra protection required beyond that listed in Section 8. In case of fire, use normal fire fighting equipment.

Spill Mitigation Procedures

Air Release: Hazardous concentrations in air may be found in local spill area and immediately downwind. Contain all solids for treatment or disposal.

Water Release: This material is insoluble in water. Notify all downstream users of possible contamination. Contain all solids for treatment or disposal.

Land Release: Avoid dust generation. Use non-sparking tools. Contain all solids for treatment or disposal.

Additional Spill Information : Remove all sources of ignition. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Dispose of spill residues per guidelines under Section 13, Disposal Consideration.

SECTION 7. HANDLING AND STORAGE

Handling: 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. Wear gloves, eye protection, dust mask and protective clothing. Do not use treated chips or sawdust as mulch. Wash hands thoroughly before eating, drinking, using tobacco products, and/or using restrooms. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Storage: Keep away from unguarded flame, sparks, and heat sources. Protect from physical damage. Maintain good housekeeping.

Incompatible Materials for Storage: oxidizers, strong acids and bases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Whenever possible, sawing or machining treated or untreated wood should be performed outdoors or in well ventilated areas to avoid accumulations of airborne wood dust. Ventilation should be sufficient to maintain exposures below the recommended exposure limits.

Protective Equipment for Routine Use of Product

Respiratory Protection : When sawing or cutting treated or untreated wood, wear a NIOSH approved P95 or P100 Particulate filter respirator. **FOR PLYWOOD PRODUCTS ONLY:** If Formaldehyde vapor levels exceed the recommended exposure limits, wearing a NIOSH approved respirator is required. Formaldehyde is a by-product of the untreated plywood article and not the result of this treatment.

Respirator Type : For plywood products only: A NIOSH approved full-face air purifying

respirator with combination formaldehyde/organic vapor cartridge and a P100 filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten (10) times the published limit.

- Skin Protection : Wear leather gloves. Wear long sleeve shirt, pants, and steel-toed shoes when handling treated or untreated wood.
- Eye Protection: Use safety glasses with side shields or chemical goggles when sawing or cutting treated or untreated wood.
- Protective Clothing Type: Wear leather gloves.
- General Protective Measures: Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining wood or wood products to prevent sparks or other ignition sources. If required, use wet methods and/or explosion suppression systems to reduce generation of dust. Local exhaust ventilation is recommended when sawing, sanding, or machining this product. General dilution ventilation is recommended in processing and storage areas.

Components with workplace control parameters

Components (CAS-No.)	Value	Control parameters	Basis (Update)
COPPER COMPOUNDS (MIXTURE)	Conc	100 mg/m3	NIOSH/GUIDE (2003)
Ethanolamine (141-43-5)	TWA	3 ppm	ACGIH (03 2013)
	STEL	6 ppm	ACGIH (03 2013)
	PEL	3 ppm 6 mg/m3	OSHA_TRANS (02 2006)
Ethanolamine (141-43-5)	Conc	30 ppm	NIOSH/GUIDE (2003)
Wood Dust (Not Assigned)	PEL	15.0 mg/m3 (as nuisance dust)	Z3
	PEL	5.0 mg/m3 (as nuisance dust)	Z3
	TWA	0.5 mg/m3 (Western Red Cedar)	ACGIH
	TWA	1.0 mg/m3 (All other species)	ACGIH
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.) (7664-41-7)	TWA	25 ppm	ACGIH (01 2010)

MATERIAL SAFETY DATA SHEET

	STEL	35 ppm	ACGIH (01 2010)
	PEL	50 ppm 35 mg/m3	OSHA_TRANS (02 2006)
Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.) (7664-41-7)	Conc	300 ppm	NIOSH/GUIDE IDLH (2005)
Formaldehyde (by-product of the untreated plywood article) (50-00-0) (Only applies to plywood products)		0.3 ppm	ACGIH (2009)
Formaldehyde (by-product of the untreated plywood article) (50-00-0) (Only applies to plywood products)	Conc	20 ppm	NIOSH/GUIDE (2005)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	solid
Form	solid
Color:	various, brown
Odor:	None
Molecular Weight:	None established
Specific Gravity :	Not applicable
pH :	Not applicable
Boiling Point:	Not applicable
Freezing Point:	Not applicable
Density:	solid
Vapor Pressure:	Not applicable
Vapor Density:	Not applicable
Viscosity:	Not applicable
Fat Solubility:	No data
Solubility in Water:	insoluble
Partition coefficient n-octanol/water:	No data
Evaporation Rate:	Not applicable
Oxidizing:	The substance has no oxidizing properties
Volatiles, % by vol.:	No data
VOC Content	No data
HAP Content	No data

SECTION 10. STABILITY AND REACTIVITY

Stability and Reactivity Summary: Stable under normal conditions. Product will not undergo hazardous polymerization.

Conditions to Avoid: Sparks, open flame, other ignition sources, and elevated temperatures., Contact with incompatible substances

Chemical Incompatibility: strong acids, oxidizers

Hazardous Decomposition Products: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Decomposition Temperature: No data

SECTION 11. TOXICOLOGICAL INFORMATION

Component Animal Toxicology

Oral LD50 value:

Ethanolamine LD50 = 1,700 mg/kg rat

Component Animal Toxicology

Dermal LD50 value:

Ethanolamine LD50 Approximately 1,000 mg/kg rabbit

Component Animal Toxicology

Inhalation LC50 value:

Ethanolamine LC50 1 h > 2.42 mg/l mouse
 LC50 4 h > 970 ppm mouse

Product Animal Toxicity

Oral LD50 value: LD50 > 3,800 mg/kg Rat
Dermal LD50 value: LD50 > 4,200 mg/kg Rabbit
Inhalation LC50 value: LC50 > 4.4 mg/l

Skin Irritation: Prolonged and/or repeated contact with treated or untreated wood dust may result in mild irritation.

Eye Irritation: Treated or untreated wood dust may cause mechanical irritation.

Skin Sensitization: Various species of untreated wood dust can elicit an allergic respiratory response in sensitized persons., Various species of untreated wood dust can elicit an allergic type skin irritation in sensitized persons.

Ethanolamine This material tested negative for skin sensitization in animals.

Subchronic / Chronic Toxicity: May cause respiratory sensitization and/or irritation., Treated or untreated wood dust, depending on the species, may cause dermatitis on prolonged, repetitive contact.

Reproductive and Developmental Toxicity: Not known or reported to cause reproductive or developmental toxicity.

Ethanolamine

This chemical has been tested in laboratory animals and no evidence of teratogenicity, embryotoxicity or fetotoxicity was seen.

Mutagenicity:

Not known or reported to be mutagenic.

Ethanolamine

This chemical has been tested in a battery of mutagenicity/genotoxicity assays and the results were negative.

Carcinogenicity:

IARC has classified untreated hardwood and hardwood/softwood mix wood dust as a Group 1 human carcinogen. The wood dust classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with occupational exposures to untreated wood dust. NTP has classified all untreated wood dust as a carcinogen.

Ethanolamine

This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA. Chemicals of similar structure have been shown not to cause cancer in laboratory animals.

SECTION 12. ECOLOGICAL INFORMATION

Overview: No data for product. Individual constituents are as follows:

Ecological Toxicity Values for: COPPER COMPOUNDS

- Lepomis macrochirus (Bluegill sunfish) - (measured, renewal) 96 h LC50 > 0.660 mg/l (as copper sulfate)
- Oncorhynchus mykiss (rainbow trout) - (measured, flow-through) 96 h LC50 > 0.0659 mg/l (as copper sulfate)
- Daphnia pulex (Water flea) - (measured, static) 48 h EC50 > 0.025 mg/l (as copper sulfate)
- Daphnia magna (Water flea) - (measured, static) 48 h EC50 = 0.0113 mg/l (as copper sulfate)
- Pseudokirchneriella subcapitata (green algae) - (nominal, static). 96 h EC50 = 0.0211 mg/l (as copper sulfate)

Ecological Toxicity Values for: Ethanolamine

- Rainbow trout (Oncorhynchus mykiss) - (nominal, static). 96 h LC50 = 150 mg/l
- Mosquito fish - (nominal, static). 96 h LC50 = 337.5 mg/l
- Bluegill - (nominal, static). 96 h LC50 = 329.16 mg/l
- Fathead minnow (Pimephales promelas), Goldfish - (measured, flow-through) 96 h LC50 = 2,070 mg/l
- Daphnia magna (Water flea) - (measured, static) 96 h LC50 = 170 mg/l
- Daphnia magna (Water flea) - (nominal, static). 24 h LC50 = 140 mg/l
- Crangon crangon (shrimp) - (nominal, renewal). 48 h LC50 > 100 mg/l
- Brine shrimp - 48 h LC50 = 7,100 mg/l
- Daphnia magna (Water flea) - 48 h EC50 = 65 mg/l

SECTION 13. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THE MATERIAL. THE USER OF THE MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal Summary : If this product becomes a waste, it will be a nonhazardous waste according to U.S. RCRA regulations. Dispose of in accordance with all Local, State, Federal, and Provincial Environmental Regulations.

Potential US EPA Waste Codes : Not applicable

SECTION 14. TRANSPORT INFORMATION

DOT

Not dangerous goods

TDG

Not dangerous goods

IATA

Not dangerous goods

IMDG-CODE

Not dangerous goods

SECTION 15. REGULATORY INFORMATION

UNITED STATES:

Toxic Substances Control Act (TSCA): This item is exempt from TSCA and FIFRA under the treated article exemption per 40 CFR 152.25(a).

EPA Pesticide Registration Number: None established

FIFRA Listing of Pesticide Chemicals Not registered in the US under FIFRA.
(40 CFR 180):

Superfund Amendments and Reauthorization Act (SARA) Title III:

Hazard Categories Sections 311 / 312 (40 CFR 370.2):

MATERIAL SAFETY DATA SHEET

Health Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard
 Physical None

The following components are subject to reporting levels established by SARA Title III, Section 302:

Components	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	0.1 %

The following components are subject to reporting levels established by SARA Title III, Section 313:

Components	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	0.1 %

Clean Air Act

Clean Air Act Toxic ARP Section 112r

CAA112_HAZ (01 1999) : Ammonia (Only applies if treatment facility adds ammonia locally. Check with treatment facility to determine applicability.) (7664-41-7)
 Threshold quantity: 10 lbs
 Threshold quantity: 20 lbs
 Toxic endpoint: 0.14 mg/L

Clean Air Act Socmi None established

Clean Air Act VOC Section 111

CAA_111 (01 1996) : Ethanolamine (141-43-5) Listed

Clean Air Act Haz. Air Pollutants Section 112 None established

US State Regulations

Massachusetts Right To Know

Ethanolamine (141-43-5)	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	

Pennsylvania Right To Know

	MATERIAL SAFETY DATA SHEET
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Ethanolamine (141-43-5)	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	

New Jersey Right To Know

Ethanolamine (141-43-5)	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	

California Prop 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

Wood Dust (Not Assigned)	
Formaldehyde (by-product of the untreated plywood article) (50-00-0) ((Only applies to plywood products))	

SECTION 16. OTHER INFORMATION

MSDS REVISION STATUS :

SECTIONS REVISED: 15

Major References : Available upon request.

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. THE MANUFACTURER BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS.