

Material Safety Data Sheet



Material Name: ACETYLATED WOOD PRODUCTS

ID: TWMSDS01

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

Chemical Name: ACETYLATED WOOD PRODUCTS

Solid Sawn Lumber Products

Engineered Lumber (Finger-Jointed Lumber and Laminated Lumber)

Product Use: Building Materials - Structural, Industrial or Decorative

Manufacturer Information

Titan Wood B.V.

+ 31 26 366 4122

Technical Information

P.O. Box 2147

+ 31 26 366 4122

MSDS Request

6802 CC Arnhem

800 262 8200

**US and Canada Emergency Phone
Chemtrec – 24 Hour Phone**

The Netherlands

Westervoortsedijk 73

Trade Name:

See section 16 for Product List

Description

These acetylated wood products are composed of solid sawn wood, such as lumber and other wood products, such as engineered lumber, bonded sometimes with adhesives from third party manufacturers (MSDS of adhesive manufacturer available on request) and have been modified using a patented process that leaves behind a trace of acetic acid (vinegar).

*** Section 2 - Hazards Identification ***

Emergency Overview

Sawing, sanding or machining wood product can produce dust which can cause an explosion hazard. Dust or splinters may cause upper respiratory tract, eye and skin irritation.

Target Organs

Eyes, skin, respiratory tract.

Potential Health Effects: Eyes

Dust or splinters may cause irritation or injury to the eyes.

Potential Health Effects: Skin

Certain species of wood may cause allergic contact dermatitis in sensitized individuals. If an allergy preexists or develops, it may be necessary to remove the sensitized worker from further exposure to dust or asphalt.

Potential Health Effects: Ingestion

Not applicable under normal use. If ingested, may cause gastrointestinal tract irritation.

Potential Health Effects: Inhalation

Dust may cause respiratory irritation, nasal dryness, coughing, sneezing, wheezing, headache and sinusitis. Repeated or prolonged exposure at elevated dust levels may result in allergic responses or respiratory sensitization in some individuals.

Medical Conditions Aggravated by Exposure

Dust may aggravate preexisting skin, eye and respiratory conditions or allergies.

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HMIS Ratings: Health: 1 Fire: 1 Physical Hazard: 0 Pers. Prot.: X

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

***** Section 3 - Composition / Information on Hazardous Ingredients *****

CAS #	Component	Percent
Not Assigned	Wood dust, all soft and hard woods*	NA

*Except Western Red Cedar

Component Information/Information on Non-Hazardous Components

Wood and wood products are manufactured articles and are not considered hazardous under OSHA Hazard Communication Standard 29 CFR 1910.1200. Wood and wood products are also exempt from WHMIS labeling and MSDS requirements. Wood dust, a by-product generated from sawing, sanding or machining wood and wood products, may be hazardous.

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

First Aid: Eyes

Do not rub your eyes. Particles may cause the eye to be scratched. Remove contact lenses if worn. Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, contact a physician.

First Aid: Skin

For skin contact, wash immediately with soap and water. If irritation persists, get medical attention.

First Aid: Ingestion

Not applicable under normal use. If ingested, may cause gastrointestinal tract irritation.

First Aid: Inhalation

If inhaled, immediately remove the affected person to fresh air. If persistent irritation, severe coughing or breathing difficulty occurs, get medical attention.

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

Flash Point: Not Applicable

Auto Ignition: 400° - 500°F (204° - 260°C) for wood

General Fire Hazards

Sawing, sanding or machining wood or wood products can produce dust which is a strong to severe explosion hazard if a dust "cloud" contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the lower explosion limit (LEL) for wood dust.

Hazardous Combustion Products

Burning of wood can produce irritating fumes and gases including carbon monoxide, aldehydes and organic acids.

Extinguishing Media

Water spray, carbon dioxide or dry chemical

Fire Fighting Equipment/Instructions

Firefighters should wear protective clothing including self-contained breathing apparatus (SCBA) to avoid breathing combustion products. Partially burned dust is especially hazardous if dispersed into the air. Wet down

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dust to reduce likelihood of ignition or dispersion. Remove burned or wet dust to open, secure area after fire is extinguished.

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 * * ***

Not applicable for product in its purchased form. Sweep or vacuum dust generated from sawing, sanding or manufacturing for recovery or disposal. Wet down accumulated wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Use with adequate ventilation. Do not inhale dusts during clean up. Use NIOSH/OSHA approved dust mask or filtering facepiece where ventilation is not possible and exposure limits could be exceeded.

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

Use this product with adequate ventilation. Avoid frequent or prolonged inhalation of wood dust. Goggles or safety glasses are recommended to protect eyes from flying particles. Avoid contact with skin and wash exposed areas thoroughly. Change protective clothing and gloves when signs of contamination appear. Wood and wood products are combustible and, therefore, should not be subjected to temperatures exceeding the autoignition temperature. Wet down wood dust generated by sawing, sanding, or machining to reduce the likelihood of ignition or dispersion of dust into the air.

Store flat, supported and protected from direct contact with the ground, in a well-ventilated, cool, dry place, away from open flames or temperatures high enough to ignite or cause smoldering combustion.

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

Exposure Guidelines

A: General Product Information

Titan Wood B.V. voluntarily elects to adhere to exposure limits contained in OSHA's 1989 Air Contaminants Standard although certain limits were vacated in 1992. The present OSHA exposure limits governing wood dust are 15 mg/m³ (Total Dust) and 5 mg/m³ (Respirable Fraction).

B: Component Exposure Limits

Wood dust, all soft and hard woods (CAS # Not Assigned)

ACGIH	1 mg/m ³ TWA (Inhalable)
OSHA:	5 mg/m ³ TWA (Total Dust)

Engineering Controls

Due to the explosive potential of dust when suspended in air, precautions should be taken when sawing, sanding, or machining wood and wood products to prevent sparks or other ignition sources in ventilation equipment. Local exhaust ventilation is recommended when sawing, sanding, machining this product. General dilution ventilation is recommended in processing and storage areas.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Goggles or safety glasses are recommended when sawing, sanding or machining this product. Ensure compliance with OSHA PPE standards 29 CFR 1910.132 (General) and .133 (Eye and face protection).

Personal Protective Equipment: Skin

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Protective clothing and gloves are recommended when sawing, sanding, machining or otherwise handling wood and wood products. Wash exposed area thoroughly after working with the wood, before eating, drinking, and use of tobacco products. Ensure compliance with OSHA's PPE Standard 29 CFR 1910.132 (General) and .138 (Hand Protection).

Personal Protective Equipment: Respiratory

A NIOSH/OSHA approved dust mask or filtering facepiece is recommended in dusty environments and where ventilation is not sufficient to keep dust levels below permissible exposure limits. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Personal Protective Equipment: General

Follow good hygienic and housekeeping practices. Clean up areas where dust settles to avoid excessive accumulation of the combustible material. Minimize generation of airborne dust concentrations.

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

Appearance:	Rigid board, available in various colors and sizes	Odor:	Light vinegar odor
Physical State:	Solid	pH:	Not Available
Vapor Pressure:	Not Applicable	Vapor Density:	Not Available
Boiling Point:	Not Applicable	Melting Point:	Not Applicable
Solubility (H2O):	Insoluble	Specific Gravity:	Not Available

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

Chemical Stability

This product is stable under ordinary conditions of use.

Chemical Stability: Conditions to Avoid

Avoid excess heat, open flames, and sparks. Avoid contact with incompatible materials.

Incompatibility

Avoid contact with some metal fastening systems which may deteriorate over time through contact with acetic acid. Please refer to user's manual for additional information.

Hazardous Decomposition

Burning of wood can produce irritating and potentially toxic fumes and gases including carbon monoxide, carbon dioxide, aldehydes and organic acids.

Hazardous Polymerization

Will not occur.

***** Section 11 - Toxicological Information *****

Acute and Chronic Toxicity

A: General Product Information

Wood dust generated from sawing, sanding, or machining may cause temporary nasal dryness, irritation of the eyes and upper respiratory system, coughing. Allergic skin and lung reactions have been reported with exposure to various wood dusts due to the naturally-occurring chemicals present in the wood.

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B: Component Analysis - LD₅₀/LC₅₀

No data available for this product.

Carcinogenicity

A: General Product Information

Not available for product in purchased form. Data for individual components are listed

B: Component Carcinogenicity

Wood dust, all soft and hard woods (CAS # Not Assigned)

- NIOSH: Potential occupational carcinogen
- NTP: Known Carcinogen
- IARC: Monograph 62, 1995 (Group 1
(carcinogenic to humans))

Other Toxicological Information

WOOD DUST: Wood dust generated from sawing, sanding or machining may cause nasal dryness, irritation, coughing and sinusitis. IARC and NTP classify wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation noted insufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust.

***** Section 12 - Ecological Information *****

No data available for this product.

***** Section 13 - Disposal Considerations *****

US EPA Waste Number & Descriptions

General Product Information

This product is not considered a hazardous material under Federal Hazardous Waste Regulations 40 CFR 261. If, however, product is altered by processing, use, or contamination, waste must be tested using methods described in 40 CFR 261 to determine whether product meets criteria for hazardous waste.

Disposal Instructions

Dispose of material according to local, state, federal and provincial regulations.

***** Section 14 - Transportation Information *****

Transportation Regulations

This product is not regulated as a hazardous material by the United States (DOT) or Canadian (TDG) transportation regulations.

***** Section 15 - Regulatory Information *****

US Federal Regulations

A: General Product Information

OSHA: Wood and wood products are considered manufactured articles and are exempt under OSHA's Hazard Communication Standard (29 CFR 1910.1200). Wood dust, a by-product generated from sawing, sanding or machining wood and wood products, is considered hazardous under OSHA's Hazard Communication Standard (29 CFR 1910.1200).

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B: Component Analysis

None of this product's component(s) are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).

State Regulations

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 dust, all soft and hard woods	Not Assigned	No	No	Yes	No	No	Yes

California Proposition 65 – Safe Drinking Water Act 1986:

None of the chemicals in this product are listed.

WHMIS Classification: Not Listed

Wood and wood products are exempt from WHMIS labeling and MSDS requirements. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

Component Analysis - WHMIS IDL

None of the chemicals in this product are listed.

Additional Regulatory Information

Component Analysis – Inventory

None of the chemicals in this product are listed on the TSCA, DSL or EINECS inventories.

*** Section 16 - Other Information ***

Other Information

Product List

Accoya® wood.

MSDS History

Effective Date: April. 8, 2008

Supersedes Date: Jan. 1, 2008

Disclaimer

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Titan Wood B.V. and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Titan Wood B.V. and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

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Key/Legend

ACGIH American Conference of Governmental Industrial Hygienists
ANSI American National Standards Institute
C Ceiling Limit
CAS Chemical Abstract Services Number
CERCLA Comprehensive Environmental Response Compensation and Liability Act
CFR Code of Federal Regulations
CWA Clean Water Act
DOT Department of Transportation
DSL Domestic Substance List
EPA Environmental Protection Agency
FDA Food and Drug Administration
HCS Hazard Communication Standard
HEPA High Efficiency Particulate Air
HMIS Hazardous Material Identification System
IARC International Agency for Research on Cancer
LC_{LO} Lowest lethal concentration of a substance
LC₅₀ Concentration of a material expected to kill 50% of an animal text group
LD_{LO} Lowest lethal dose of a material
LD₅₀ Dose of a material expected to kill 50% of an animal text group
NA Not Available or Not Applicable
NFPA National Fire Protection Association
NIOSH National Institute for Occupational Safety and Health
NJTSR New Jersey Trade Secret Registry
N O S Not Otherwise Specified
NSL Non-Domestic Substance List
NTP National Toxicology Program
OSHA Occupational Safety and Health Administration
PPE Personal Protective Equipment
SARA Superfund Amendments and Reauthorization Act
STEL Short Term Exposure Limit
TC_{LO} Lowest Concentration in Air Resulting in a Toxic Effect
TD_{LO} Lowest Dose Resulting in a Toxic Effect
TDG Canadian Transportation of Dangerous Goods
TLV Threshold Limit Value
TSCA Toxic Substance Control Act
TWA Time Weighted Average
WHMIS Workplace Hazardous Materials Information System

Contact: Product Safety and Health Information

Contact Phone: + 31 26 3664122

End of MSDS

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WOOD PRODUCTS CAUTION!

SAWING, SANDING OR MACHINING WOOD PRODUCTS CAN PRODUCE WOOD DUST WHICH CAN CAUSE A FLAMMABLE OR EXPLOSIVE HAZARD. WOOD DUST MAY CAUSE LUNG, UPPER RESPIRATORY TRACT, EYE AND SKIN IRRITATION. SOME WOOD SPECIES MAY CAUSE DERMATITIS AND/OR RESPIRATORY ALLERGIC EFFECTS. EXPOSURE TO WOOD DUST MAY CAUSE CANCER.

PRECAUTIONS

Avoid dust contact with ignition source.
Avoid frequent or prolonged inhalation of wood dust.
Protect eyes from flying particles.
Avoid dust contact with skin and wash exposed areas.

FIRST AID

If inhaled, remove to fresh air. In case of contact, flush eyes and skin with water. If irritation persists, call a physician.

HANDLING AND STORAGE

Avoid frequent or prolonged inhalation of wood dust. Protect eyes from flying particles. Avoid contact with skin and wash exposed areas thoroughly. Change protective clothing and gloves when sign of contamination appear. Wood products are combustible and, therefore, should not be subjected to temperatures exceeding the auto ignition temperature. Wet down wood dust generated by sawing, sanding, or machining to reduce the likelihood of ignition or dispersion of dust into the air.

For additional information, see the Titan Wood B.V. Material Safety Data Sheet and / or Product Information Sheet for this product.

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Technical Information
MSDS Request

US and Canada Emergency Phone