

Safety Data Sheet

Section 1: Identification

Product identifier

- Product Name** • **Wood Dust**
- Synonyms** • Sawdust, Sanderdust

Relevant identified uses of the substance or mixture and uses advised against

- Recommended use** • Raw material, fuel

Details of the supplier of the safety data sheet

- Manufacturer** • RedBuilt LLC
PO Box 60
Boise, ID 83707
United States
www.RedBuilt.com
- Telephone (General)** • (208) 364-1200

Emergency telephone number

- Manufacturer** • (208) 364-1200
- Manufacturer** • (800) 424-9300 - CHEMTREC

Section 2: Hazard Identification

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Classification of the substance or mixture

- UN GHS**
- Note: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g. milling/cutting/sanding) which creates small particles resulting in the potential hazards as described below.
Skin Sensitization 1
Respiratory Sensitization 1
Carcinogenicity 1A
Specific Target Organ Toxicity Repeated Exposure 1

Label elements

UN GHS

DANGER



- Hazard statements** • May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Use personal protective equipment as required.
In case of inadequate ventilation wear respiratory protection.
- Response** • IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF ON SKIN: Wash with plenty of soap and water.
Wash contaminated clothing before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation or rash occurs: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

UN GHS

- May form combustible dust concentrations in air.
According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012

- Note: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g. milling/cutting/sanding) which creates small particles resulting in the potential hazards as described below.
Skin Sensitization 1
Respiratory Sensitization 1
Carcinogenicity 1A
Specific Target Organ Toxicity Repeated Exposure 1
Combustible Dust

Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause cancer.
Causes damage to organs through prolonged or repeated exposure.
May form combustible dust concentrations in air.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, clothing, and eye/face protection, .

In case of inadequate ventilation wear respiratory protection.

- Response** • IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
If on skin: Wash with plenty of water .
Wash contaminated clothing before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation or rash occurs: Get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

Classification of the substance or mixture

WHMIS

- Note: This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous by downstream activities (e.g. milling/cutting/sanding) which creates small particles resulting in the potential hazards as described below.
Other Toxic Effects - D2A
Other Toxic Effects - D2B

Label elements

WHMIS



- Other Toxic Effects - D2A
Other Toxic Effects - D2B

Other hazards

WHMIS

- May form combustible dust concentrations in air.
In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

Substances

Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Wood	NDA	100%	NDA	UN GHS: Carc. 1A; STOT RE 1 (Lungs); Resp. Sens. 1; Skin Sens. 1; OSHA HCS 2012: Comb. Dust; Carc. 1A; STOT RE 1 (Lungs); Resp. Sens. 1; Skin Sens. 1	NDA

Bifenthrin	CAS:82657-04-3	< 0.01%	NDA	UN GHS: Exposure limits OSHA HCS 2012: Exposure limits	This ingredient can be found primarily in treated versions of this wood product; trace amounts may be found in untreated versions.
------------	----------------	------------	-----	---	--

In *AFL-CIO v OSHA*, 965 F. 2d 962 (11th Cir. 1992), the Court overturned OSHA's 1989 Air Contaminants Rule, including the specific PEL's for wood dust that OSHA had established at that time. The 1989 vacated PEL's were: 5mg/m³ STEL (15 min)-10mg/m³ PEL-TWA (all softwood and hardwood except Western Red Cedar) - Western Red Cedar; TWA 2.5 mg/m³. Wood dust is now regulated by OSHA as "Particulates Not Otherwise Regulated" (PNOR), or Nuisance Dust. However, some states have incorporated the 1989 OSHA PELs in their state plans. Additionally, OSHA indicated that it may cite employers under the OSH Act general duty clause in appropriate circumstances for noncompliance with the 1989 PELs.

- Material does not meet the criteria of a mixture.

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If irritation develops and persists, get medical attention.

Eye

- In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion

- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

- Immediate medical attention after exposure to this material not expected to be necessary. No special treatment indicated related to exposure to this material.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Water, carbon dioxide, sand.

Unsuitable Extinguishing Media • None known.

Special hazards arising from the substance or mixture

Unusual Fire and 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.

Hazardous Combustion Products • No data available

Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions • Ventilate the area before entry. Stay upwind. Do not walk through spilled material.

Emergency Procedures • Contain spill and monitor for excessive dust accumulation. Avoid unnecessary

personnel and equipment traffic in the spill area.

Environmental precautions

- No special environmental precautions necessary.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Sweep up while carefully monitoring dust concentrations in the air or vacuum using vacuum equipped with a HEPA filter.
Avoid creating dusty conditions whenever feasible. Assess situation and control potential explosion and exposure hazards.
Place recovered wood dust in a container for proper disposal.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

- Minimize dust generation and accumulation. Do not use in areas without adequate ventilation. 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. Keep away from heat and ignition sources – No Smoking. Do not breathe dust. Avoid prolonged and repeated contact with the skin.

Conditions for safe storage, including any incompatibilities

Storage

- Keep container closed. Store in a cool, dry, well-ventilated place. Store away from open flame.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Wood	TWAs	10 mg/m ³ TWA (inhalable particles, recommended); 3 mg/m ³ TWA (respirable particles, recommended) <i>as Particulates not otherwise classified (PNOC)</i> 0.5 mg/m ³ TWA (inhalable fraction) <i>as Wood dust, western red cedar</i> 1 mg/m ³ TWA (inhalable fraction) <i>as Wood dusts (all other wood dusts)</i>	1 mg/m ³ TWA <i>as Wood dust, all soft and hard woods</i>	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction) <i>as Particulates not otherwise classified (PNOC)</i>

Exposure controls

Engineering Measures/Controls

- Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). It is recommended that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Use only appropriately classified electrical equipment.

Personal Protective Equipment

- Respiratory**
- For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.
- Eye/Face**
- Wear safety goggles.
- Hands**
- Wear appropriate gloves.
- Skin/Body**
- Wear long sleeves and/or protective coveralls.
- General Industrial Hygiene Considerations**
- Handle in accordance with good industrial hygiene and safety practice.
- Environmental Exposure Controls**
- Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Light to dark colored, granular solid. Color and odor are dependent on the wood species and time since dust was generated.
Color	Light to dark colored.	Odor	No data available
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	No data available
Decomposition Temperature	No data available	pH	No data available
Specific Gravity/Relative Density	Variable; depends on wood species and moisture	Water Solubility	Insoluble
Viscosity	No data available		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	No data available	UEL	No data available
LEL	No data available	Autoignition	No data available
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

Section 10: Stability and Reactivity

Reactivity

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization will not occur.

Conditions to avoid

- Ignition sources, heat, chemical incompatibilities. Avoid open flame. Product may ignite at temperatures in excess of 400°F

Incompatible materials

- Avoid contact with oxidizing agents.

Hazardous decomposition products

- Spontaneous and rapid hazardous decomposition will not occur. Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Thermal decomposition (i.e. smoldering, burning) products include carbon monoxide, carbon dioxide, aliphatic aldehydes, resin acids, terpenes, and polycyclic aromatic hydrocarbons.

Section 11 - Toxicological Information

Information on toxicological effects

Components		
Bifenthrin (< 0.01%)	82657-04-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 54500 µg/kg; Skin-Rabbit LD50 • >2 g/kg; Multi-dose Toxicity: Ingestion/Oral-Dog TDLo • 397.8 mg/kg 90 Day(s)-Intermittent; <i>Behavioral:Tremor</i>

GHS Properties	Classification
Acute toxicity	UN GHS • No data available OSHA HCS 2012 • No data available
Skin corrosion/Irritation	UN GHS • No data available OSHA HCS 2012 • No data available
Serious eye damage/Irritation	UN GHS • No data available OSHA HCS 2012 • No data available
Skin sensitization	UN GHS • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1
Respiratory sensitization	UN GHS • Respiratory Sensitizer 1 OSHA HCS 2012 • Respiratory Sensitizer 1
Aspiration Hazard	UN GHS • Not relevant OSHA HCS 2012 • Not relevant
Carcinogenicity	UN GHS • Carcinogenicity 1A OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	UN GHS • No data available OSHA HCS 2012 • No data available
Toxicity for Reproduction	UN GHS • No data available OSHA HCS 2012 • No data available
STOT-SE	UN GHS • No data available OSHA HCS 2012 • No data available

STOT-RE

UN GHS • Specific Target Organ Toxicity Repeated Exposure 1
OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1**Potential Health Effects****Inhalation****Acute (Immediate)**

- Exposure to dust may cause irritation. Processes such as cutting, grinding, crushing, or impact may result in generation of excessive amounts of airborne dusts in the workplace. Nuisance dust may affect the lungs but reactions are typically reversible. Wood dust (generated from sawing, sanding or machining the product) may cause nasal dryness, irritation, coughing and sinusitis. Wood dust (generated from sawing, sanding or machining the product) may cause nasal dryness, irritation, coughing and sinusitis.

Chronic (Delayed)

- Prolonged exposure to the dust may cause wheezing, chest tightness, productive cough nasal irritation and symptoms of chronic respiratory disease. Wood dust, depending on the species, may cause respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels.

Skin**Acute (Immediate)**

- Exposure to dust may cause mechanical irritation. May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)

- No data available.

Eye**Acute (Immediate)**

- Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.

Chronic (Delayed)

- No data available.

Ingestion**Acute (Immediate)**

- Excessive concentrations of nuisance dust in the workplace may cause mechanical irritation to mucous membranes.

Chronic (Delayed)

- No data available

Carcinogenic Effects

- According to its Twelfth Report on Carcinogens NTP states, "many case reports and epidemiological studies (including cohort studies and case-control studies that specifically addressed nasal cancer) have found a strong association between exposure to wood dust and cancer of the nasal cavity. Strong and consistent associations with cancer of the nasal cavity and paranasal sinuses were observed both in studies of people whose occupations were associated with wood-dust exposure and in studies that directly estimated wood dust exposure." IARC has most recently concluded that "there is sufficient evidence in humans for the carcinogenicity of wood dust. Wood dust causes cancer of the nasal cavity and paranasal sinuses and of the nasopharynx."

Carcinogenic Effects			
	CAS	IARC	NTP
Wood as Wood dust, all soft and hard woods	NDA	Group 1-Carcinogenic	Known Human Carcinogen

Section 12 - Ecological Information**Toxicity**

- Material data lacking.

Persistence and degradability

- Material data lacking.

Bioaccumulative potential

- Material data lacking.

Mobility in Soil

- Material data lacking.

Results of PBT and vPvB assessment

- PBT and vPvB assessment has not been carried out.

Other adverse effects

- Material data lacking.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class (es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Chronic, Pressure(Sudden Release of)

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Bifenthrin	82657-04-3	No	No	No	No	No
Wood	NDA	No	No	No	No	No

Canada

Labor

Canada - WHMIS - Classifications of Substances

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

Canada - WHMIS - Ingredient Disclosure List

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

Environment**Canada - CEPA - Priority Substances List**

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

United States**Labor****U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals**

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

Environment**U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants**

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Bifenthrin	82657-04-3	1.0 % de minimis concentration
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		carcinogen, 12/18/2009

U.S. - California - Proposition 65 - Developmental Toxicity

• Bifenthrin	82657-04-3	Not Listed
• Wood as Wood dust, all soft and hard woods		Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

- | | | |
|--|------------|------------|
| • Bifenthrin | 82657-04-3 | Not Listed |
| • Wood as Wood dust, all soft and hard woods | | Not Listed |

Other Information

- **WARNING:** This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information**Revision Date**

- 11/April/2016

Preparation Date

- 11/April/2016

Disclaimer/Statement of Liability

- The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. The information contained herein is based on data considered accurate and reliable. Nevertheless, the user should perform its own investigation and independent verification of the information. No warranty is expressed or implied regarding the accuracy or correctness of the data. It is the user's responsibility both to determine safe conditions for use of this product and to prevent loss, injury and damage from use of the product. In compiling the SDS, the supplier has taken into account all proper applications of the material of which we are aware and any user of the material should consult the supplier before applying it to any novel or unusual use. It is the responsibility of any intermediate supplier to ensure that the information contained in this MSDS is passed to the ultimate user. If any such ultimate user wishes to make arrangement for revisions to be sent directly to them, the supplier shall, if so notified, be glad to consider the modifications.

Key to abbreviations

NDA = No data available