



1. Identification of Substance & Company

Product

Product name	Azwood Wood Pellets
Other names	Firetime, OnFire
HSNO approval	Not applicable – non hazardous
Approval description	Non hazardous
UN number	Not regulated
Proper Shipping Name	Not regulated
Packaging group	Not regulated
Hazchem code	Not regulated
Uses	Wood fuel pellets

Company Details

Company	Azwood Energy
Address	P.O.Box 2180 Stoke Nelson 7041 New Zealand
Telephone	0800 AZWOOD (299 663)
Fax	03 547 3258
Website	www.azwood.co.nz
Email	care@azwood.co.nz

Emergency Telephone Number: 0800-764 766

2. Hazard Identification

Approval

This product is considered non hazardous under the Hazardous Substances and New Organisms Act (HSNO).

Classes Hazard Statements

None

SYMBOLS

None

Other Classifications

There are no other classifications that are known to apply.

Precautionary Statements

Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

3. Composition / Information on Ingredients

Component	CAS/ Identification	Concentration
Wood dust and chips, dried and compacted, Pinus Radiata & Douglas fir*	NA	100%

*Contains no treated timber or wood material.

4. First Aid

General Information

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been harmed, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service). If exposed or concerned: get medical advice.

Recommended first aid facilities Ready access to running water is recommended.

Exposure

Swallowed Due to the nature of the product, this route of exposure is not expected under normal condition. Give a glass of water to drink.

Eye contact If dust gets in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

Skin contact No first aid is necessary.



Inhaled Wood dust may cause irritation to nose, throat and lungs resulting in breathing difficulty. However, call a POISON CENTER or doctor/physician if you feel unwell.

Advice to Doctor
Treat symptomatically

5. Firefighting Measures

Fire and explosion hazards: Wood pellets are combustible and will burn in a fire. In addition, wood dusts may be explosive at high concentrations. LEL of wood dust: 40g/m³ or air.

Suitable extinguishing substances: Flammability of wood fuel pellets is the same as other wood products. Fire may be extinguished using water or other firefighting mediums.

Unsuitable extinguishing substances: Unknown.

Products of combustion: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. The formation of nitrous oxides is also possible at high temperatures.

Protective equipment: Self-contained breathing apparatus. Safety boots, non-flammable overalls, gloves, hat and eye protection.

Hazchem code: 1T (recommended)

6. Accidental Release Measures

Containment There is no current legal requirement for containment of this product.

Emergency procedures Not applicable.

Clean-up method Not applicable.

Disposal Not applicable.

Precautions Work up wind or increase ventilation if significant dust is generated.

7. Storage & Handling

Storage Stored in a cool dry place. Avoid storage of harmful substances with food. Keep from extreme heat and open flames. Avoid contact with incompatible substances as listed in Section 10.

Handling Minimise dust generation and accumulation. See section 8 with regard to personal protective equipment requirements. Avoid skin and eye contact and inhalation of dusts.

8. Exposure Controls / Personal Protective Equipment

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m³ for respirable particulates and 10mg/m³ for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds (2016)	Ingredient	WES-TWA	WES-STEL
	Wood dusts:		
	Hardwood dust	1 mg/m ³	Data unavailable
	Softwood dust	2 mg/m ³	Data unavailable

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes Protective eyewear is not normally necessary when using this product. However, it always prudent to use protective eyewear if dust is likely.

Skin Protective gloves and clothing are not normally necessary. However, it is prudent to wear gloves when handling chemicals in bulk or for an extended period of time.

Respiratory Respirator is not required under normal use. Ensure adequate natural ventilation. If product is being used in confined conditions and dust formation is likely, the use of a particulate mask or respirator is recommended.

WES Additional Information
Not applicable

9. Physical & Chemical Properties

Appearance	Compressed wood pellets, 6mm diameter
Odour	Wood odour
pH	NA
Vapour pressure	NA
Viscosity	Solid
Boiling point	NA
Volatile materials	NA
Freezing / melting point	NA
Solubility	Insoluble in water
Specific gravity / density	>650kg/m ³ bulk density.
Flash point	NA
Danger of explosion	NA
Auto-ignition temperature	NA
Upper & lower flammable limits	NA
Corrosiveness	Non corrosive

10. Stability & Reactivity

Stability	This product is unlikely to react or decompose under normal storage conditions. This product will not undergo polymerisation reactions. Keep dry until used.
Conditions to be avoided	Keep away from sources of ignition and flammable materials (see below).
Incompatible groups	Strong oxidising agents.
Substance Specific Incompatibility	There are no specific incompatibilities for this chemical.
Hazardous decomposition products	Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen, and under some circumstances, oxides of nitrogen. Water.
Hazardous reactions	No specific hazards.

11. Toxicological Information

Summary

Dusts generated from wood pellets may be irritating to eyes, skin and respiratory system. Some sensitised individuals may experience allergic contact dermatitis and skin rashes. Inhalation of fine wood dusts may result in a runny nose, sneezing, blocked nose. Sensitised individuals may experience allergic responses such as asthma

Supporting Data

Acute	Oral	No evidence of acute toxicity
	Dermal	The estimated LD ₅₀ (dermal, rat) for the mixture is > 5,000 mg/kg.
Inhaled	Inhaled	The estimated LC ₅₀ (inhalation, rat) for the mixture is >5 mg/L (dust mist).
	Eye	Wood dusts may cause irritation.
Chronic	Skin	Wood dusts may cause irritation.
	Sensitisation	Wood dust is listed as a sensitizer.
	Mutagenicity	No data for timber is available.
	Carcinogenicity	Hard wood dusts are considered confirmed/suspected carcinogen depending on the hard wood type (WorkSafe). These pellets are made from Pinus radiata and douglas fir, which are considered softwood. The National Toxicology Program (NTP) and The International Agency for Research on Cancer (IARC) classify wood dust as a human carcinogen (IARC Group 1). This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dusts. q
	Reproductive / Developmental	No data for wood is available.



**Systemic
Aggravation of
existing conditions**

No data for wood is available.
Repeated exposures over many years to uncontrolled woods dust from wood fuel pellets may increase the risk of allergic dermatitis, asthma, or chronic nose or throat irritation in some people. The risk of nasal or paranasal sinus cancers may also be increased. If workplace practices noted in this SDS are followed, no chronic health effects are anticipated.

12. Ecological Data

Summary

Wood fuel pellets are not considered ecotoxic.

Supporting Data

Aquatic	No evidence of ecotoxicity towards aquatic organisms.
Bioaccumulation	Not bioaccumulative
Degradability	Readily degradable.
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	No evidence of toxicity towards terrestrial vertebrates
Terrestrial invertebrate	No evidence of toxicity towards terrestrial invertebrates.
Biocidal	no data
Environmental effect levels	No EELs are available for this mixture or ingredients

13. Disposal Considerations

Restrictions	Local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. May be buried in approved land disposal facility in accordance with local regulations.
Contaminated packaging	There are no product-specific restrictions however, local council and resource consent conditions may apply, including requirements of trade waste consents.

14. Transport Information

There are no specific restrictions for this product (not a dangerous good).

UN number:	not regulated	Proper shipping name:	not regulated
Class(es)	NA	Packing group:	NA
Precautions:	NA	Hazchem code:	NA

15. Regulatory Information

This product is not considered to be a hazardous substance under the HSNO act.

Specific Workplace Controls (as per HSNO approval referenced to Controls Matrix)

Not applicable

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

16. Other Information

Abbreviations

CAS Number	Unique Chemical Abstracts Service Registry Number
EC₅₀	Ecotoxic Concentration 50% – concentration in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and New Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL	Lower Explosive Limit
LD₅₀	Lethal Dose 50% – dose which is fatal to 50% of a test population (usually rats).
LC₅₀	Lethal Concentration 50% – concentration in air which is fatal to 50% of a test population (usually rats)
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
PES	Prescribed Exposure Standard means a WES or a biological exposure standard that is prescribed in a regulation, a safe work instrument or an approval under HSNO (including group standards).
STEL	Short Term Exposure Limit - The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UEL	Upper Explosive Limit
UN Number	United Nations Number
WES	Workplace Exposure Standard - The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID) http://www.epa.govt.nz/hs/compliance/chemicals.html , for specific chemicals.
EPA Transfer Gazettes Controls Matrix	Classifications and controls assigned for specific ingredients (consolidated gazette, 2004) Part of the EPA New Zealand User Guide to the HSNO Control Regulations
WES 2013	The NZ Workplace Exposure Standards Effective from 2013, published by WorkSafe NZ and available on their web site – www.worksafe.govt.nz .
Other References:	Suppliers SDS

Review

Date	Reason for review
June 2017	Not applicable – new SDS

Disclaimer

This SDS was prepared by Datachem LTD and is based on our current state of knowledge, including information obtained from suppliers. The SDS is given in good faith and constitutes a guideline (not a guarantee of safety). The level of risk each substance poses is relevant to its properties (as summarised in the SDS) AND HOW THE SUBSTANCE IS USED. While guidelines are given for personal protective equipment, such precautions must be relevant to the use. The likely HSNO classifications for this SDS have been estimated based on general information from the supplier (e.g., hazard, toxicological). This SDS is copyright Datachem and must not be copied, edited or used for other than intended purpose. To contact the SDS author, email info@datachem.co.nz or phone: +64 9 940 30 80.

