



## MATERIAL SAFETY DATA SHEET (MSDS)

### WOOD PELLETS

#### 1. Product

Product Name: Wood Pellets

Product Supplier: Various

Chemical Names: N/A

Intended Use: Bulk / Bagged Wood Pellets for Heating & Cooking

#### 2. Health Hazard Data

Maximum Exposure Limit (MEL): 5.00 mg/m<sup>3</sup>

Potentially Hazardous Components: None

#### 3. Composition

Components Hardwood Sawdust, chips and small percentage of bark from virgin wood species

#### 4. Emergency and First Aid Procedures

Eye Contact: Flush thoroughly with water for 10 minutes. If irritation persists, seek medical advice.

Skin Contact: Wash with soap and water. Should a rash appear, seek medical advice.

Inhalation: Remove to fresh air, if breathing difficulties or severe coughing occur, seek medical advice.

Ingestion: Do not ingest water or induce vomiting. No harmful effects, however you should seek medical advice.

#### 5. Fire and Explosion Hazard Data

Thermal Stability: Layer Ignition Temperature ("LIT", 0C) 340

Extinguishing Media Water, Foam

Unusual Fire Hazards: None

Explosion Severity: Pmax (bar g) 7.8



Kst Value (bar.m.s-1) 130 ST Class 1

Minimum Ignition Energy (MIE, mJ) 25 – 100

Minimum (dust cloud) Ignition Temperature (MIT) 4700C

Firefighting: All forms of extinguishing media may be used

## 6. Accidental Release / Spill Procedures

Environmental Impact: Product is natural and the environmental impact of a spill will be negligible, however all spills must by law be cleaned up.

## 7. Handling and Storage Information

- Pellets stored in a poorly ventilated space can let off a dangerous quantity of odourless carbon monoxide;
- No entry for unauthorised or untrained persons. Keep children away from the storeroom. The storeroom should be locked;
- Check the atmosphere with an appropriate device before entry into the pellet store;
- No smoking, fires or naked flames;
- The room should be adequately ventilated before entering. Keep the door fully open whilst inside;
- There is a danger of injury from moving parts;
- Pellet stores are defined as a 'confined space', a brief guide to working safely can be downloaded from the HSE website: <http://www.hse.gov.uk/pubns/indg258.pdf>

## 8. Exposure Controls / Personal Protection

Exposure: Under normal conditions exposure to pellets should not present any risk

Eye Protection Not normally required but may be advisable under delivery conditions.

Skin Protection: No special equipment required; however, good personal hygiene practices should always be followed

Respiratory Protection: No special requirements under normal conditions of use.

Over a period of time toxic fumes may build up when pellets are stored in an enclosed area. Under no circumstances should storage areas be accessed until they have been properly ventilated



## 9. Typical Properties for Health Evaluations

Appearance Solid fuel pellet 6 – 8 mm diameter X approx. 1 cm long

Odour: Mild wood smell

Solubility in water: Decomposes from pellet to sawdust

## 10. Stability and Reactivity Data.

Stability: Stable

Conditions to avoid: Wet

Incompatibility: Water – Decomposition of pellet will occur

## 11. Toxicological Data.

Studies have shown no evidence of softwood dust being carcinogenic however as with all fine dusts it could potentially be hazardous and should be controlled.

Prolonged storage of large quantities may lead to a build-up of toxic fumes.

Ensure area is well ventilated prior to entry.

## 12. Ecological Information

Mobility: Any dust generated during the filling of stores is highly mobile especially when airborne.

Degradability: Biodegradable as for wood.

Bio accumulative potential: Not determined.

Aquatic toxicity: Toxicity to bacteria, algae and higher marine organisms not tested.

## 13. Disposal Considerations

The product is not considered hazardous waste

## 14. Transport Information

UK Supply Classification: Non-classifiable



UK Carriage Classification: Non-classifiable

UK Conveyance Classification: Non-classifiable

## 15. Regulatory Information

(a) Label Information: UK Supply Classification - Non-classifiable

UN Number - None

(b) Other Regulations:

This product is not covered by CLP 2015 (Classification, labelling and packaging) 2015.

## 16. Other Information

- Use vacuum suction or dust sock when filling.
- Ventilate store well before entering as toxic fumes may have built up
- Dispose of waste carefully.

Carbon Monoxide; What is it?

Carbon monoxide (CO) is a colourless, odourless, tasteless, poisonous gas produced by an auto-oxidation process, especially oxidation of the fatty acids contained in the wood.

The depletion ratio is a function of temperature, pressure, bulk density and void in wood pellets, relative humidity in air (if ventilated) as well as the age and composition of the raw material.

The figures below are from measurements of gas generated within the space of wood pellets at approximately constant pressure.

When CO enters the body, it prevents the blood from bringing oxygen to cells, tissues, and organs.

Early symptoms of carbon monoxide (CO) poisoning can mimic many common ailments and may easily be confused with food poisoning, viral infections, flu or simple tiredness.

Symptoms to look out for include:

- Headaches or dizziness
- Breathlessness
- Nausea
- Loss of consciousness



- Tiredness
- Pains in the chest or stomach
- Erratic behaviour
- Visual problems

Note: This list may not be exhaustive, and users should satisfy themselves that they comply with all the relevant and latest issue national legislation. The purpose of the above information is to describe the product only in terms of Health and Safety requirements. The information given should not, therefore, be construed as guaranteeing specific properties or as specification. Customers should satisfy themselves as to the suitability and completeness of such information for their own particular use.