

Section 1.0 **Identification**

GHS product identifier: **Burnhard Premium Wood Pellets Hickory 944121**

National standard on manufacture: **Manufactures specifications**

Recommended use of the product

and restriction on use: **Wood pellets- a kind of alternative fuel**  
**Generate heat and smoke for food preparation**


Manufacture Company identification:


**Springlane GmbH**  
**Reisholzer Werftstrasse 25A**  
**40589 Düsseldorf**  
**Fon +49 (0) 211 749 551 0**  
**Fax +49 (0) 211 749 551-10**  
[www.burnhard.de](http://www.burnhard.de)  
**Customer Support**  
[Service@burnhard.com](mailto:Service@burnhard.com)

Emergency phone number: national/international:

**Monday to Friday from 8:00 a.m. to 6:00 p.m**  
**0049 0800 270 70 27**

Section 2 **HAZARD IDENTIFICATION**

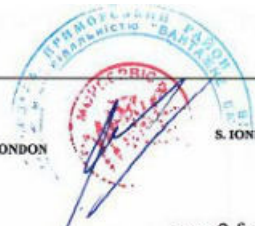
<b>GHS classification of substance or mixture</b>	<i>SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION, class 4.2</i> <b><u>Classification as per the requirements of EC N 1272/2008</u></b> <i>Self-heating substances, H252</i>
<b>GHS label elements</b>	 <p style="text-align: right;"><i>Signal word: WARNING!</i></p> <p><i>H252 May self-heating in large quantities of the substances</i> <b>Precautionary statements – Hazard</b> <i>Not applicable</i> <b>Precautionary statements – Precaution</b> <i>P103 Read label before use.</i> <i>P235+P410 Keep cool. Protect from sunlight.</i> <i>P280 Wear protective gloves / protective clothing / eye protection / face protection.</i> <b>Precautionary statements – Storage</b> <i>P407 Maintain air gap between stacks / pallets.</i> <i>P420 Store away from other materials.</i></p>
<b>Other hazards</b>	<i>When in contact "cloud" of dust with the source of ignition the wood dust can cause an explosion.</i>



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Pellets may produce carbon monoxide, carbon dioxide, methane and hydrocarbons.

**Section 3 COMPOSITION/INFORMATION&INGREDIENTS**

<b>Substance chemical identification</b>	<i>PRESSED WOOD SHAVINGS</i>
<b>General name of substance, synonyms</b>	<i>WOOD PELLETS</i>
<b>Register number CAS (of service of analytical review preparation in chemistry)</b>	<i>Wood fibres CAS No 9004-34-6 Lignine CAS No 9005-53-2</i>
<b>Impurities and stabilizing additives</b>	<i>No data</i>

**Section 4 FIRST AID MEASURES**



<b>Description of necessary first-aid measures</b>	<i>Inhalation</i>	<i>Symptoms</i>	<i>Dust irritates respiratory tract. May cause lung damage.</i>
		<i>First-aid measures</i>	<i>Fresh air, rest. Give oxygen in case panting.</i>
	<i>Ingestion</i>	<i>Symptoms</i>	<i>Ingestion of large quantities (dust) can cause the gastrointestinal tract irritation.</i>
		<i>First-aid measures</i>	<i>Rinse mouth with water. Give to drink 2-4 cups of water or milk. Induce vomiting.</i>
	<i>Skin contact</i>	<i>Symptoms</i>	<i>Irritation, redness.</i>
		<i>First-aid measures</i>	<i>Remove contaminated clothing. Wash with soap and water.</i>
<i>Eyes contact</i>	<i>Symptoms</i>	<i>Earing, burning. May cause conjunctivitis.</i>	
	<i>First-aid measures</i>	<i>Remove contact lenses, if any. Wash eyes with plenty quantity of water during some minutes. Seek medical advice if necessary.</i>	
<b>Most important symptoms/effects acute and delayed</b>		<i>Dust can cause allergic reactions, dermatitis, bronchitis or asthma development.</i>	
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>		<i>At a poisoning with evolving gases to see a doctor.</i>	

**Section 5 FIRE FIGHTING MEASURES**

<b>Extinguishing Media</b>	<i>Acceptable</i>	<i>Small fire: dry powder extinction. Large fire: use water spray or fog</i>
	<i>Non-acceptable</i>	<i>No data</i>
<b>Specific hazards</b>	<i>It may ignite from sparks, flames. It can ignite again even after the fire is extinguished. Self-heating is possible.</i>	
<b>Special protective action</b>	<i>Cool container with cargo and neighboring cargo storage areas with water fog. In case of fire is possible a release of toxic gases. Wear full protective equipment, including personal respiratory protective equipment.</i>	

**Section 6 ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions</b>	<i>Wear full protective clothing and personal respiratory protective equipment (see Section 8). Evacuate personnel. Remove all sources of ignition. Avoid formation dust. Use non-</i>
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	<i>sparking equipment.</i>
<b>Environmental precautions</b>	<i>No special precautions.</i>
<b>Methods and materials for containment and cleaning up</b>	<i>No special precautions. Sweep spillage or collect it in container for disposal. Avoid formation of dust.</i>

**Section 7 HANDLING AND STORAGE**


<b>Precautions for safe handling</b>	<i>Always store pellets in containment with a minimum of one air exchange per 24 hours. For long period storage in large bulk containment shall be as air tight as possible. For shorter period open storage ventilate to eliminate gases. Protect from heating sources. Execute ventilation and measurement with gas meter has confirmed safe atmosphere in the space at the entrance to enclosed spaces with pellets. If ventilation and gas control is not performed, use only self-contained breathing apparatus when entering space. Avoid breakage of pellets caused by it pneumatic handling. Avoid dust generation and accumulation at transfer points and in areas close to mechanical moving parts. A door to space is labeled with warning sign: "Dangerous area – low level of oxygen". Store at temperature from 0° to 30° C.</i>
<b>Conditions for safe storage, including any incompatibilities</b>	<i>Protect the pellets from contact with water and moisture to avoid swelling, increased off-gassing, microbial activity and subsequent self-heating. Segregate the pellets from oxidizing agents (e.g. poly-oxides capable of transferring oxygen molecules such as permanganate, perchlorate) or reducing agent (e.g. chemical compounds which includes atoms with low electronegativity such as ferrous ions (rust), sodium ions (dissolved sea salt)).</i>

**Section 8 EXPOSURE CONTROLS, PERSONAL PROTECTION**

<b>Control parameters</b>	<i>Maximum allowable concentration (MAC) of wood dust – 5 mg/m<sup>3</sup>. Maximum allowable concentration (MAC) of carbon monoxide – 20 mg/m<sup>3</sup>. Minimum allowable concentration of oxygen in a closed cargo space should be not less 21% by volume. <b>BEFORE ENTRY IN SPACES WITH PELLETS ALWAYS MEASURE CARBONEMONOXIDE AND OXYGEN.</b></i>	
<b>Appropriate engineering controls</b>	<i>A Gas-analyzer for CO, CO<sub>2</sub> and oxygen measurement.</i>	
<b>Individual protection measures</b>	<b>Eye/face protection</b>	<i>Wear safety glasses under the appropriate rules of OSHA (US) or EN 166(EU).</i>
	<b>Skin protection</b>	<i>Wear protective gloves under the specifications of EU Directive 89/686/EEC. Protective clothing should protect against dust.</i>
	<b>Respiratory protection</b>	<i>Use personal protective equipment according to the appropriate rules of OSHA relating to respiratory organs CFR 1910.134 or EN 149(EU).</i>
	<b>Thermal hazards</b>	<i>Not applicable</i>

**Section 9 PHYSICAL&CHEMICAL PROPERTIES**


<b>Cargo appearance</b>	<i>Solid. Pellets</i>
<b>Odour</b>	<i>Wood odour</i>
<b>Odour threshold</b>	<i>No data</i>
<b>pH</b>	<i>Not applicable</i>



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Melting point/freezing point	<i>Not applicable</i>
Initial boiling point and boiling range	<i>Not applicable</i>
Flash point	<i>Not applicable</i>
Evaporation rate	<i>Not applicable</i>
Flammability (solid, gas)	<i>Flammable</i>
Upper/lower flammability or explosive limits	<i>No data</i>
Vapour pressure	<i>Not applicable</i>
Vapour density	<i>Not applicable</i>
Density	<i>1.07</i>
Solubility	<i>Break down in water to feedstock fractions (before pressing)</i>
Partition coefficient: n-octanol/water	<i>Not applicable</i>
Auto-ignition temperature	<i>380<sup>o</sup> C</i>
Viscosity	<i>Not applicable</i>
Self-heating	<i>Liable to self-heating in presence of oxygen and moisture</i>



Special risks	Properties / Safety characteristics / Test result and Remarks / Guidance
<b>Self-heating chemical substances and mixtures</b>	<p>* Analysis of solids liable to self-ignition of pellets has been carried out according to UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Edition VI ST/SG/AC.10/11/Rev.6, Section 33 "Classification procedures, Test methods and Criteria relating to class 4".</p> <p>DSTU 4500-4:2006 Dangerous cargoes. Test methods.</p> <p>DSTU 4500-3:2008 Dangerous cargoes. Classification.</p> <p>The presented pellets sample on Stages of determination I did not pass the test (sample undergo self-heating and should be classified as class 4.2). On Stages of determination II and III the sample pass the test.</p> <p>The test results of the pellets sample are outlined in the Report # MC-06/20* dd 13.02.2020 (Report is enclosed).</p>

Section 10 STABILITY & REACTIVITY

Reactivity	<i>Reacts with oxidizing agents and reducing agents (see "Possibility of hazardous reactions").</i>
Chemical stability	<i>No decomposition</i>
Bio-degradability	<i>100%</i>
Possibility of hazardous reactions	<i>Protect the pellets from contact with water and moisture to avoid swelling, increased off-gassing, microbial activity and subsequent self-heating. Segregate the pellets from oxidizing agents (e.g. poly-oxides capable of transferring oxygen molecules such as permanganate, perchlorate) or reducing agent (e.g. chemical compounds which includes atoms with low electronegativity such as ferrous ions (rust), sodium ions (dissolved sea salt)).</i>
Conditions to avoid	<i>Heating, moisture</i>
Incompatible materials	<i>see "Possibility of hazardous reactions"</i>
Dangerous products of decomposition	<i>CO and CO<sub>2</sub>, methane</i>

Section 11 TOXICOLOGICAL INFORMATION

Acute toxicity	<i>It has low toxicity. In normal conditions and with the proper handling of the substance it does not harm a person.</i>
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Skin corrosion/irritation	<i>It is not classified as a skin irritant. Contact may cause moderate irritation.</i>	
Serious eye damage irritation	<i>It is not classified as an eye irritant. Contact may cause discomfort and redness.</i>	
Respiratory or skin sensitisation	<i>Not a skin and respiratory sensitizer.</i>	
Germ cell mutagenicity	<i>Does not have mutagenic properties.</i>	
Carcinogenicity	<i>Does not have carcinogenic properties.</i>	
Reproductive toxicity	<i>Does not affect reproductive properties.</i>	
Specific target organ toxicity – single exposure	<i>Does not have</i>	
Specific target organ toxicity – repeated exposure	<i>Does not have</i>	
Aspiration hazard	<i>Does not have</i>	
Information on the likely routes of exposure	<i>Inhalation</i>	<i>Not toxic by inhalation. Irritates the respiratory tract.</i>
	<i>Injection</i>	<i>Not toxic by injection. Irritates the gastrointestinal tract.</i>
	<i>Skin/eye contact</i>	<i>Not toxic at skin/eye contact. Irritates the skin/eyes.</i>
Symptoms related to the physical, chemical and toxicological characteristics	<i>Irritation of mucous membranes, skin from dust.</i>	
Delayed and immediate effects and also chronic effects from short and long term exposure	<i>No data</i>	
Numerical measures of toxicity (such as acute toxicity estimates)	<i>Not applicable</i>	

Section 12 **ECOLOGICAL INFORMATION**



Eco-toxicity	<i>No toxic to environment</i>
Persistence and degradability	<i>Stable to decomposition</i>
Bio accumulative potential	<i>No information</i>
Mobility in soil	<i>No mobility</i>
Other adverse effects	<i>No information</i>

Section 13 **DISPOSAL CONSIDERATION**

Disposal methods	<i>Mechanical. Collect in containers for waste.</i>
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Section 14 **TRANSPORT INFORMATION**

UN №	<i>3088</i>
UN Proper shipping name	<i>ADR/RID – SELF-HEATING ORGANIC SOLID, N.O.S. IMDG – SELF-HEATING ORGANIC SOLID, N.O.S.</i>
Transport hazard class	<i>ADR/RID class – 4.2 IMDG – class – 4.2 The cargo is exempted from the prescriptions concerning class 4.2 and be shipped as non-hazardous if use a packaging of no more than 3 cub.m, suitable for transportation of hazard cargoes. The conclusion has been done based on the carried out test of the pellets sample in accordance with the Report # MC-06/20*pp 13.02.2020 and Certificate # MCL-06/20 (see Section 9) Shipment the cargo should be provided with both the Self-Heating Certificate</i>
Packing group	<i>ADR/RID – III IMDG – III</i>
Environmental hazards	<i>Substance doesn't classified as environmental pollutant in IMDG Code, ADR, AND, CRTD and UN Model Regulations.</i>

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<b>Special precautions for user</b>	<i>No special precautions</i>
<b>Transportation in bulk according Appendix II of MARPOL 73/78 and IBC Code</b>	<i>Not applicable</i>

Section 15 REGULATORY INFORMATION

<b>National standard on manufacture</b>	<i>MANUFACTURER'S SPECIFICATIONS</i>
<b>System of standards of labour safety</b>	<i>GOST 12.1.007. Harmful substances. Classification and general requirements to safety. GOST 12.1.005-88 *...sanitary-hygienic requirements to area of working zone</i>
<b>Montreal protocol</b>	<i>Not covered by the Protocol</i>
<b>Stockholm convention</b>	<i>Not covered by the Convention</i>
<b>Rotterdam convention</b>	<i>Not covered by the Convention</i>

Section 16 ADDITIONAL INFORMATION


<b>General</b>	<p><i>The above information is correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials.</i></p> <p><i>This information applies only to the consignment specified in Section 1.</i></p> <p><i>MORSERVICE shall not be held liable for any damage resulting from incorrect handling of the above product or do not comply with the prescribed safety precautions.</i></p> <p><i>The responsibility for observance of laws and instructions is hold liable user of production.</i></p>
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13.02.2020

**DEVELOPER:**  
**CERTIFIED CHEMICAL ENGINEER**



**L. TSYMBALAR**

	<b>MORSERVICE</b> Specialized organization on estimation of transport hazards of cargoes acts on behalf of the Ministry of Infrastructure of Ukraine 30, Proobrazhenskaya street, Odessa, 65082, Ukraine Fax/Tel: (048) 737-34-94; (048) 737-76-58; E-Mail: morservice@tinet.ua
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	Competent authority of Ukraine designated by IMO MSC.1/Circ.1563 dd 10.03.2017	Date 13.02.2020
	Quality management system is certified in compliance with ISO 9001:2008 by Shipping Register of Ukraine	  CHIEF OF CARGO BUREAU MEMBER OF NAUTICAL INSTITUTE, LONDON  S. IONIN
	The Member of the International Institute of Marine Surveying, London Membership No 491m	

**MATERIAL SAFETY DATA SHEET # MSDS 2015**  
Developed for transportation of fuel briquettes in bulk

It's developed according to the requirements of DSTU GOST 30333-2007 and the United Nations Organization Global Harmonised System of Classification and Labelling of Chemicals (GHS) (with regard to the requirements of ILO Standard under the Recommendation 177, ISO 11014, the EU Safety Data Sheet Directive 91/155/EEC and the American National Standard Institute (ANSI) standard Z 400.1)