



Hop Pellets

Safety Data Sheet

Note

Hop Pellets are not classified as dangerous products according to European Union legislation, and their use is as a food product in the brewing of beer. However, this safety data sheet is provided voluntarily according (as appropriate) to the principles of the Classification, Labelling, and Packaging Regulations (Regulation (EC) No 1272/2008).

1. Identification of the Substance and of the Company

1.1	Product Identifier:	LUPOMAX™ Hop Pellets
	Synonyms:	Hop Pellets, Enriched Hop Pellets
1.2	Relevant Uses:	For use as an ingredient in the brewing of beer
1.3	Supplier and Emergency Contact Details:	John I. Haas, Inc. 1600 River Road, Yakima, WA 98902 Business phone: +1-509-469-4000 Email: info@johnihaas.com Website: www.johnihaas.com

2. Hazards Identification

2.1	Classification:	Not classified (Regulation (EC) No 1272/2008) Not classified (Directive 67/548/EEC)
2.2	Label Elements:	Not applicable (not classified)
2.3	Other Hazards:	Associated dust may be irritating to eyes, mouth, and throat.

3. Components/Information on Ingredients

The product consists entirely of pelleted hop cones of the cultivated hop plant *Humulus lupulus*, from different varieties, that have been enriched by physical means. The product is natural and contains no additives.

4. First Aid Measures

4.1	Description of First Aid Methods:	<u>Inhalation</u> : Move to fresh air. <u>Skin Contact</u> : Brush off excess material and wash skin thoroughly with soap and water. <u>Eye Contact</u> : Flood the eye with plenty of water. If any symptoms persist obtain medical attention. <u>Oral Ingestion</u> : Drink large amounts of water to dilute. Vomiting may occur but should not be induced. Obtain medical attention if symptoms persist.
4.2	Most Important Symptoms and Effects:	None known (See Section 2.3)
4.3	Indication of Immediate Medical Attention or Special Treatment:	None known

5. Fire-Fighting Measures

5.1	Extinguishing Media:	Carbon dioxide, dry powder, and foam. Keep containers and surroundings cool with water spray. Great care should be taken using water/jet spray.
5.2	Special Hazards Arising from Substance:	None known

5.3	Advice for Firefighters:	Firefighters should wear self-contained positive pressure breathing apparatus.
6. Accidental Release Measures		
6.1	Personal Protection:	Wear appropriate protective clothing – see Section 8
6.2	Environmental Precautions:	Do not discharge onto the ground or into watercourses
6.3	Methods for Clean Up:	Normal cleanup procedures as for any agricultural commodity
7. Handling and Storage		
7.1	Precautions for Safe Handling:	Avoid generating excessive dust. Avoid excessive contact with product. Use appropriate protective clothing as indicated in Section 8. Wash hands after use.
7.2	Conditions for Safe Storage:	To guarantee quality avoid heat, moisture, and strong odors during storage. Pellets should not be exposed to temperatures above 20 °C (68 °F) since it is possible that gases will be formed from hop constituents. The resulting pressure increase may cause bursting of the foils and exposure of the pellets to air, resulting in oxidation and a considerable deterioration of quality. Suitable storage containers are thick gauge laminated foil bags, stainless steel, and lacquered mild steel.
7.3	Specific End Uses:	The substance is manufactured for use as a food ingredient and for such uses is not subject to registration via REACH (Regulation (EC) No1907/2006). It should be used in accordance with applicable food legislation.
8. Exposure Controls / Personal Protection		
8.1	Control Parameters:	Not applicable
8.2	Exposure Controls:	<u>Engineering Controls</u> : Provide adequate ventilation. <u>Eye/Face Protection</u> : If in danger of generating dust, wear goggles. <u>Hand Protection</u> : Gloves possible (not mandatory) <u>Skin Protection</u> : Gloves possible (not mandatory) <u>Respiratory Protection</u> : If in danger of generating dust, wear a facemask.
9. Physical and Chemical Properties		
9.1	Appearance:	Pelleted powder; various shades of green
9.2	Odor:	Characteristic, typical hoppy, depends on variety
9.3	Odor Threshold:	No data available
9.4	pH:	No data available
9.5	Melting Point:	No data available
9.6	Boiling Point:	No data available
9.7	Flash Point:	No data available
9.8	Evaporation Rate:	Not applicable – solid
9.9	Flammability:	No data available
9.10	Upper/Lower Flammability:	No data available
9.11	Vapor Pressure:	No data available
9.12	Vapor Density:	No data available
9.13	Density:	0.45 – 0.70 g/cm ³ , varies with production parameters

9.14 Solubility in Water:	Insoluble
9.15 Partition Coefficient:	No data available
9.16 Autoignition Temperature:	No data available
9.17 Decomposition Temperature:	No data available
9.18 Viscosity at 20 °C:	Not applicable – solid
9.19 Explosive Properties:	No data available
9.20 Oxidizing Properties:	No data available
10. Stability and Reactivity	
10.1 Reactivity:	No reactivity hazards known
10.2 Chemical Stability:	Stable if stored in accordance with 7.2
10.3 Possibility of Hazardous Reactions:	None known
10.4 Conditions to Avoid:	See Section 7.2
10.5 Incompatible Materials:	None known
10.6 Hazardous Decomposition Products:	None known
11. Toxicological Information	
11.1 Acute Toxicity:	None known. Hops are generally recognized as safe (GRAS) for their intended use in accordance with US FDA regulations 21 CFR 170.30(c) and 170.3(f). Supported by a long history of safe use in brewing.
11.2 Skin Corrosion or Irritation:	No data available
11.3 Serious Eye Damage or Irritation:	No data available
11.4 Respiratory or Skin Sensitization:	No data available
11.5 Germ Cell Mutagenicity:	No data available
11.6 Carcinogenicity:	No data available
11.7 Reproductive Toxicity:	No data available
11.8 STOT-Single Exposure:	No data available
11.9 STOT-Repeated Exposure:	No data available
11.10 Aspiration Hazard:	No data available
12. Ecological Information	
12.1 Toxicity:	No data available
12.2 Persistence and Degradability:	No data available. All-natural product.
12.3 Bioaccumulative Potential:	No data available. All-natural product, not expected to bioaccumulate.
12.4 Mobility in Soil:	No data available
12.5 Results of PBT and vPvB Assessment:	No data available
12.6 Other Adverse Effects:	No data available
13. Disposal Considerations	
13.1 Product Disposal:	Dispose in accordance with all applicable local and national regulations.

13.2 Container Disposal:	Labels should not be removed from containers until they have been cleaned. Contaminated containers should not be treated as household waste. Containers should be cleaned using appropriate methods and then reused or disposed of by landfill or incineration as appropriate.
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14. Transport Information

14.1 UN-Number:	Non-hazardous for transport
14.2 Class:	Non-hazardous for transport
14.3 Shipping Name:	LupoMAX Hop Pellets
14.4 Packing Group:	Non-hazardous for transport
14.5 Marine Pollutant:	No data available

15. Regulatory Information

15.1 Safety, Health, and Environmental Regulations:	No data available
15.2 Chemical Safety Assessment:	No data available

16. Other Information

The information in this safety data sheet is believed to be 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 our present knowledge and should be used only as a supplement to information already in your possession concerning this product. It does not represent any guarantee of the properties of the product. The determination of whether and under what condition the product should be used is yours to make. We do not accept any liability for loss, injury, or damage that may result from its use.