

Hop Pellets (Type 90 Pellets)

Material Safety Data Sheet

1. Product and Supplier Information	
Name:	Hop Pellets (Type 90 Pellets)
Synonyms:	PEL/PE 90 Kettle Pellets, Hop Pellets
Supplier:	<p>Barth-Haas Group/Botanix Ltd. The Moor, Eardiston, Tenbury Wells, Worcestershire, WR15 8JJ, UK Emergency phone:+44 1568 797 895 or 01584 875 395 Email: intrad@botanix.co.uk</p> <p>Barth-Haas Group/John I. Haas, Inc. 5185 MacArthur Boulevard, N.W., Suite 300, Washington, DC, 20016 USA Emergency phone: +1 202 777 4800 Email: info@johnihaas.com</p> <p>Barth-HaasGroup/ Hopfenveredlung St. Johann GmbH & Co. KG Mainburger Str. 15, 93558 St. Johann, Germany Emergency phone: +49 9444 878 0 E-mail: contact@hopfenveredlung.de</p>
2. Components/Composition	
Product consists entirely of pelleted hop cones of the cultivated hop plant <i>Humulus lupulus</i> . Many different varieties.	
	Humulones (Alpha-acids) Lupulones (Beta-acids)
CAS number:	26472-41-3 468-28-0
3. Health Hazard Data	
Main hazards:	none
Oral ingestion:	associated dust may be irritating to mouth and throat
Eye contact:	associated dust may be irritating to eyes
Skin contact:	not applicable
4. Emergency and First Aid Procedures	
Eye contact:	Wash out with plenty of water.
Skin contact:	Brush off excess material and wash skin thoroughly with soap and water.
5. Fire and Explosion Hazard Data	
Extinguishing media:	Use dry powder, foam or carbon dioxide. Keep containers and surroundings cool with water spray.
Unsuitable extinguishing media:	Great care should be taken using water jet/spray.
Special hazards of product:	none

6. Accidental Release/Spill measures	
Personal protection:	Wear appropriate protective clothing.
Environmental precautions:	Do not allow product to enter drains.
Normal clean-up procedure as for any agricultural commodity.	
7. Handling and Storage	
Storage temperature	• 0-5 °C (32-41°F)
To guarantee quality avoid heat, moisture, strong odours during storage. Pellets should not be stored at temperatures above 20 °C (68 °F) since it is possible that gases are formed from hop constituents. The resulting pressure increase may cause bursting of the foils. Consequently the pellets are exposed to air and oxidation takes place resulting in a considerable deterioration of quality. Suitable storage containers are thick gauge laminated foil bags, stainless steel and lacquered mild steel.	
8. Exposure Controls/Personal Protection	
Respirator:	If in danger of generating dust use facemask
Hand protection:	Not required
Body protection:	Not required
Eye protection:	If in danger of generating dust wear goggles
9. Physical and Chemical Properties	
Form:	Pelleted powder
Color:	Various shades of green
Odor:	Characteristic, typical hoppy
Boiling Point:	Not applicable
Density (kg/m ³):	480-700
Solubility in Water:	Insoluble in water
pH:	Not applicable
Flash point:	Not applicable
Evaporation Rate:	Not applicable
10. Stability and Reactivity	
Hop constituents oxidize in contact with air, no hazardous reactivity known. If originally sealed packages are stored at temperatures above 20 °C (68 °F), gas formation is possible. Combustion will generate oxides of carbon.	
11. Toxicological Information	
Supported by a long history of safe use in brewing and in accordance with US FDA 21 CFR 170.30(c) and 170.3(f), hop pellets are generally recognized as safe (GRAS).	
12. Ecological Information	
The product is all natural and biodegradable.	
13. Disposal Considerations	
Product disposal:	Dispose of in accordance with all applicable local and national regulations.
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 re-used or disposed of by landfill or incineration as appropriate.

14. Transport Information

UN-No: N/C	RID: N/C
Class: N/C	Packing Group: N/C
recommended Transport conditions:	Quickest possible transport at temperatures below 20 °C (68 °F)

15. Regulatory Information

Labeling according to EC directives	
R-phrases:	Not applicable
S-phrases:	Not applicable
Einecs Listing:	Not listed

16. Other Information

The information in this Safety Data sheet is correct to the best of our knowledge. This information herein is furnished without warranty of any kind. This information should be used only as a supplement to information already in your possession concerning this product. The determination of whether and under what condition the product should be used by your employees is yours to make. We do not accept any liability for loss, injury or damage that may result from its use.