

Note

Isomerized hop pellets are not classified as a dangerous product 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 Preparation and of the Company

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| 1.1 Product Identifier: | Isomerized Hop Pellets |
| Synonyms: | Pre-isomerized Hop Pellets, Iso-pellets, Isopellets |
| 1.2 Relevant Uses | For use as an ingredient in the brewing of beer |
| 1.3 Supplier: | BarthHaas / BarthHaas UK |
| 1.4 Emergency Contact Details: | <p>Hop Pocket Lane, Paddock Wood, Kent, TN12 6DQ, UK Emergency phone: +44 1892 833 415 (09:00 - 17:30 Mon-Thurs; 09:00 - 16:30 Fri, UK time) Email: enquiries@barthhaas.co.uk</p> <p>BarthHaas / John I. Haas, Inc. 5185 MacArthur Boulevard, N.W., Suite 300, Washington DC, 20016 USA. Emergency phone: +1 202 777 4800 (office hours) Email: info@johnihaas.com</p> <p>Hopfenveredlung St. Johann GmbH Mainburger Str. 15, 93358 St. Johann, Germany Emergency phone: +49 9444 878 0 E-mail: contact@hopfenveredlung.de</p> |

2. Hazards Identification

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| 2.1 Classification: | Not classified (Regulation (EC) No. 1272/2008) Not classified (Directive 67/548/EEC) |
| 2.2 Label Elements: | N/A (not classified) |
| 2.3 Other Hazards: | This product is a pelleted form of pre-isomerized hops for use as an ingredient for the brewing of beer - see Section 3. It has not been fully tested. Associated dust may be irritating to mouth, throat and eyes. |

3. Components/Information on Ingredients

Product consists entirely of hop cones of the cultivated hop plant *Humulus lupulus* pelleted in presence of small amounts of magnesium oxide (amount dependent on variety). Isomerized pellets are available from many varieties of hops.

4. First Aid Measures

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| 4.1 Description of First Aid Methods: | <p>Inhalation: Move to fresh air. If symptoms persist obtain medical attention.</p> <p>Skin Contact: Wash skin thoroughly with soap and water. Launder contaminated clothing before re-use.</p> <p>Eye Contact: Immediately flood the eye with plenty of water. If any symptoms persist obtain medical attention.</p> <p>Oral Ingestion: Drink large amounts of water to dilute. Vomiting may</p> |
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| | occur but should not be induced. Obtain medical attention if symptoms persist. |
| 4.2 Most Important Symptoms and Effects: | None known. |
| 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. Great care should be taken using a water jet/spray. |
| 5.2 Special Hazards Arising from Substance: | None known. |
| 5.3 Advice for Firefighters: | Fire fighters 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 Cleaning Up: | Normal clean-up 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: | Store at 0 - 8 °C (32 - 46 °F). Suitable storage containers are thick gauge laminated .foil bags, stainless steel and lacquered mild steel. To guarantee quality avoid heat, moisture, strong odors during storage. |
| 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) No.1907/2006). It should be used in accordance with applicable food legislation. |

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| 8. Exposure Controls / Personal Protection | |
| 8.1 Control Parameters: | Not applicable. |
| 8.2 Exposure Controls: | <p><u>Engineering Controls:</u> Provide adequate ventilation.</p> <p><u>Eye/Face Protection:</u> If in danger of generating dust, wear a facemask.</p> <p><u>Hand Protection:</u> Not required</p> <p><u>Skin Protection:</u> Not required</p> <p><u>Respiratory Protection:</u> If in danger of generating dust, wear a facemask.</p> |
| 9. Physical and Chemical Properties | |
| Appearance: | Solid pellets; various shades of green |
| Odour: | Characteristic, pungent, depends on variety |
| Odour Threshold: | No data available |

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| pH: | No data available |
| Melting Point: | No data available |
| Boiling Point: | No data available |
| Flash Point: | No data available |
| Evaporation Rate: | No data available |
| Flammability: | No data available |
| Upper/Lower Flammability: | No data available |
| Vapour Pressure: | No data available |
| Vapour Density: | No data available |
| Density: | 450 - 700 kg.m ⁻³ |
| Solubility in Water: | Insoluble |
| Partition Coefficient: | No data available |
| Autoignition Temperature: | No data available |
| Decomposition Temperature: | No data available |
| Viscosity at 20 °C: | No data available |
| Explosive properties: | No data available |
| Oxidising properties: | No data available |

10. Stability and Reactivity

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| 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

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| 11.1 Acute Toxicity: | No data available. Hops and hop extracts are generally recognized as safe (GRAS) for their intended use in accordance with US FDA regulation, 21 CFR 170.30(c) and 170.3(f). No TLVs established. |
| 11.2 Skin Corrosion/Irritation: | No data available |
| 11.3 Serious Eye Damage/Irritation: | No data available |
| 11.4 Respiratory or Skin Sensitisation: | 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 |

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| 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 |
| 12.3 Bioaccumulative Potential | No data available |
| 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 | |
| Product disposal: | Dispose 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-Number: | Non-hazardous for transport |
| Class: | Non-hazardous for transport |
| Shipping name: | N/A |
| Packing group: | Non-hazardous for transport |
| 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 | |
| <p>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.</p> | |