



PRODUCT SPECIFICATION - North America

PRODUCT DETAILS

Product Name BioHaze
Product Code 20571978

INGREDIENT LISTING

Gum Acacia (FEMA# 2001), Tannic Acid (FEMA# 3042)

USAGE / APPLICATION INFORMATION

BioHaze is a unique product from natural plant extracts designed to deliver a cloudy appearance in beer. It is a free flowing microgranular powder that can be added to final beer. **BioHaze** acts by binding with protein molecules in beer and forming polyphenol-protein complexes. These complexes provide beer with its stable cloudy appearance.

It is recommended to prepare a 2-5% solution in cold de-aerated water for dosing. Recommended dose rate is 50-100 g/hl (500 to 1000 ppm), which is equal to a 2.5- 5 litres of a 2% solution, or 1-2 litres of 5% solution (wt/vol) per hl of beer. If this solution is to used within a day of preparation, there is no need to add preservative.

Preparation of Solution:

When preparing a solution of **BioHaze** a standard agitator is sufficient. It disperses easier in cold water so it is best to use cold water, and sufficient time should be given stirring to ensure complete dissolution. Proceed as follows using standard high-speed agitator for 1000 liters of a 2.0% solution:

- Place 1000 liters of cold water in tank and turn on the agitator until a good vortex is formed.
- Take 20 kg of **BioHaze** and add slowly at the vortex ensuring no lumps are formed.
- Stir until dissolved and the time will be dependent on the water temperature and the speed of agitator. The cooler the water the easier it is to disperse; however, dissolution is slower at low temperatures.

KEY PARAMETERS

Test	Min	Max	Units
Moisture		15	g/100g

MICROBIOLOGICAL DATA

Aerobic plate count	<1000 cfu/g
Enterobacteriaceae	<10 cfu/g
Yeasts & Moulds	<200 cfu/g
E. coli	Absent/25 g
Salmonella	Absent/25 g

ALLERGEN DATA

Allergen	Present Yes/No
Beef and products thereof	No
Carrot and products thereof	No
Celery and products thereof	No
Cereals containing gluten(1)	No
Chicken meat and products thereof	No
Cocoa and products thereof	No
Coriander and products thereof	No
Corn/maize and products thereof	No
Crustaceans and products thereof	No
Egg and products thereof	No
Fish and products thereof (3)	No
Glutamate and products thereof	No
Milk and products thereof (including lactose)	No
Mustard and products thereof	No
Nuts (other than peanuts) and products thereof(2)	No
Molluscs and products thereof	No
Legumes and products thereof	No
Lupin and products thereof	No
Peanuts and products thereof	No
Pork and products thereof	No
Sesame Seeds and products thereof	No
Soybeans and products thereof	No
Sulphur Dioxide/Sulphites > 10ppm	No
Wheat and products thereof(4)	No

Definitions conform with EU Regulation (EU) No 1169/2011 as amended, US Food Allergen Labelling and Consumer Protection Act (FALCP) and ALBA-list.

(1) i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strain

(2) Nut allergens: Almond *Prunus dulcis* (Rosaceae) Beech nut *Fagus* spp. (Fagaceae), Brazil nut *Bertholletia excelsa* (Lecythidaceae), Butternut *Juglans cinerea* (Juglandaceae), Cashew *Anacardium occidentale* (Anacardiaceae), Chesnut (Chinese, American, European, Seguin) *Castanea* spp.(Fagaceae), Chinquapin *Castanea pumila* (Fagaceae), Coconut *Cocos nucifera* L. (Arecaceae (alt. Palmae)), Fibert/Hazelnut *Corylus* spp. (Betulaceae), Ginko nut *Ginkgo biloba* L.(Ginkgoaceae), Hickory nut *Carya* spp.(Juglandaceae), Lichee nut *Litchi chinensis* Sonn. (Sapindaceae), Macadamia nut/Bush nut *Macadamia* spp.(Proteaceae), Pecan *Carya illinoensis* (Juglandaceae), Pine nut/Pinon nut *Pinus* spp. (Pinaceae), Pili nut *Canarium ovatum* (Burseraceae), Pistachio *Pistacia vera* L. (Anacardiaceae), Sheanut *Vitellaria paradoxa* (Sapotaceae), Walnut (English, Persian, Black, Japanase, California), Heartnut, *Juglans* spp.(Juglandaceae)

(3) Isinglass is used as a fining agent in beer and wine. It is exempt from declaration, as defined in Annex II of Regulation (EU) No 1169/2011 as amended.

(4) i.e. common wheat, durum wheat, club wheat, spelt, semolina, Einkorn, emmer, kamut and triticale.



SUITABILITY DATA

	Yes = Suitable, No = Unsuitable	Comment/Certification Status
Vegetarian (Ova-lacto)	Yes	
Vegan	Yes	
	Certified / Not Certified	Comment
Halal	Not Certified	Suitable
Kosher	Not Certified	Suitable

NUTRITION INFORMATION

Nutrient	Max	Units
Energy	65	kJ/100g
Energy	15	kCal/100g
Total carbohydrates		g/100g
Total fat		g/100g
Protein	3	g/100g
Moisture		g/100g
Ash		g/100g

Date Source

Values quoted are typical and should be used for guidance purposes only.

PROCESS SUMMARY

Kerry has implemented and maintains food hygiene standards and HACCP Plans in line with the requirements of food legislation.

The Carrigaline, Co Cork site is certified against the requirements of FSSC22000 and ISO14001.

RECOMMENDED SHELF-LIFE & STORAGE

Transport & Storage Conditions: Product must be maintained in cool, dry conditions below 20 °C.

Shelf life (Original package): 730 days (24 months).

PACKAGING

Pack size (Net)	20 Kg
Pack Type Inner	Plastic
Pack Type Outer	Cardboard Box

HEALTH AND SAFETY DATA

As per Safety Data Sheet (SDS). SDS available on request.



LEGISLATION & WARRANTY STATEMENT

We warrant that the product is manufactured in accordance with the specification and is manufactured and packaged in compliance with all EU food and food safety legislation applicable to products of this nature at time of manufacture and sale by us.

We make no further warranty in relation to the product or as to the suitability of the product for any specific purpose or application. The user should satisfy itself as to the suitability of the product as an ingredient in a specific application or for any use whatsoever. The information supplied in this specification sheet is in accordance with our product formulation, is also based on manufacturing plant data and on data provided by our raw material suppliers and is accurate to the best of our knowledge at the date of issue of this specification. Local national regulations should also be consulted by user in relation any specific application and in relation to appropriate ingredient declarations as legislation may vary from country to country.

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