



# PRODUCT SPECIFICATION

PRODUCT NAME:

**LupuStab®**

## Statement of Conformance

BetaTec Hop Products guarantees that all lots of LupuStab® produced after the revision date meet the following specification.

## Description

LupuStab® is a proprietary aqueous formulation of hop acids. It is produced from a CO<sub>2</sub> extract of hops.

## Storage

Store at 5 – 25 °C (41 – 77 °F). Keep container closed and out of direct sunlight and prevent from freezing, (above 0 °C/32 °F)

## Regulatory Information

Hops and hop extracts are general recognized as safe (GRAS) in accordance with the US FDA regulation 21 CFR 182.20.

<u>Characteristic</u>	<u>Specification</u>	<u>Method</u>
Appearance:	Amber/brown liquid <sup>(1)</sup>	Visual
Identification (HPLC):	Meets test	HPLC
Assay, As hop acids by HPLC (w/w):	9.5% - 10.5%	HPLC method
pH:	10.0 – 11.5	pH meter
Lead:	Less than 1 ppm	ICP <sup>(2)</sup>
Cadmium:	Less than 1 ppm	ICP <sup>(2)</sup>
Chromium:	Less than 1 ppm	ICP <sup>(2)</sup>
Arsenic:	Less than 1 ppm	ICP <sup>(2)</sup>
Mercury:	Less than 1 ppm	AFS <sup>(3)</sup>

(1) Some precipitation may occur

(2) Inductively Coupled Plasma

(3) Atomic Fluorescence Spectrometry

**This product is manufactured on behalf of BetaTec® by Barth-Haas UK, Ltd. Paddock Wood, U.K. and John I. Haas, Inc., Yakima, Washington USA**

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