

## Certificate of Analysis

**Supplier:** Yakima Chief - Hopunion LLC.  
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**Date of Issue:** 20-June-2017

**Product Name:** Type 90 Hop Pellets

**Lot Number:** P91-ZJUPAL0085  
**Product Code:** PEL-T90-FLN24-070  
**Variety:** Palisade

<u>Characteristic</u>	<u>Typical Analysis</u>	<u>Actual Analysis</u>
<b>Alpha Acids:</b>	2.5 - 17.5% (w/w) UV Spectro by ASBC HOPS - 6A	8.4%
<b>Beta Acids:</b>	3.0 - 9.0% (w/w) UV Spectro by ASBC HOPS - 6A	6.7%
<b>Hop Storage Index:</b>	Varies by Variety and Time from Harvest Hop Storage Index by ASBC Hops - 12	0.226
<b>Lead:</b>	< 1.0 ppm	passes test
<b>Arsenic:</b>	< 0.5 ppm	passes test
<b>Cadmium:</b>	< 0.03 ppm	passes test
<b>Total Heavy Metals:</b>	< 10 ppm (asPb)	passes test



Missy Raver  
Quality Control Manager