



YAKIMA CHIEF - HOPUNION LLC

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## Certificate of Analysis

**SUPPLIER:** YAKIMA CHIEF - HOPUNION, LLC.  
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**PRODUCT NAME:** Leaf Hops

**LOT NUMBER:** PR2-YKUSTE5060  
**PRODUCT CODE:** CDC-F001x05K11P  
**VARIETY:** Sterling

| <u>CHARACTERISTIC</u>                           | <u>TYPICAL ANALYSIS</u>   | <u>ACTUAL ANALYSIS</u>  |
|---|---|---|
| <b>ALPHA ACIDS:</b>                             | 2.5 - 17.5% (w/w)<br>LCV by EBC Analytica V 7.5   | 7.4 %   |
| <b>OIL BY DISTILLATION:</b>                     | Varies by Variety<br>ASBC Hops - 13 (% v/w)   | 1.5 %   |
| <b>OIL PROFILE BY GC, EBC Analytica V 7.12:</b> | <b>B-Pinene:</b> 0.7 %<br><b>Myrcene:</b> 44.5 %<br><b>Linalool:</b> 0.7 %<br><b>Caryophyllene:</b> 5.4 % | <b>Farnesene:</b> 19.4 %<br><b>Humulene:</b> 17.7 %<br><b>Geraniol:</b> 0.3 % |
| <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 (as Pb)  | passes test   |

  
Missy Raver  
Quality Control Manager

This product was manufactured in a plant whose quality/environmental system is registered as being in conformity with ISO 9001:2008 and ISO 14001:2004.

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