



YAKIMA QUALITY HOPS

Testing completed by:



Certificate of Analysis

CoA ID	Date of Issue	Test Date
CEN-2400_Amended	10/28/2024	10/15/2024, 10/16/2024

Sample Type	Variety	Total Oil (mL/100G)
T90 Pellet	Centennial	2.1
Alpha %	Beta %	HSI
9.9	3.5	0.248
ASBC Hops-6A (Alpha Acid Determination by UV-Spectrophotometry)		
HopTechnic-008 (HSI Determination by Calculation, Modified EBC 7.8)		
HopTechnic-116 (Total Oil Determination, ASBC Hops-16)		

Released by: 

Date: 10/28/2024

6371 Fort Rd Toppenish, WA 98948

509-865-6422

*Results are related only to the samples tested and may or may not be representative of the lot. CoA has been amended from CEN-2400 issued 10/25/2024 to change formatting of the COA template.



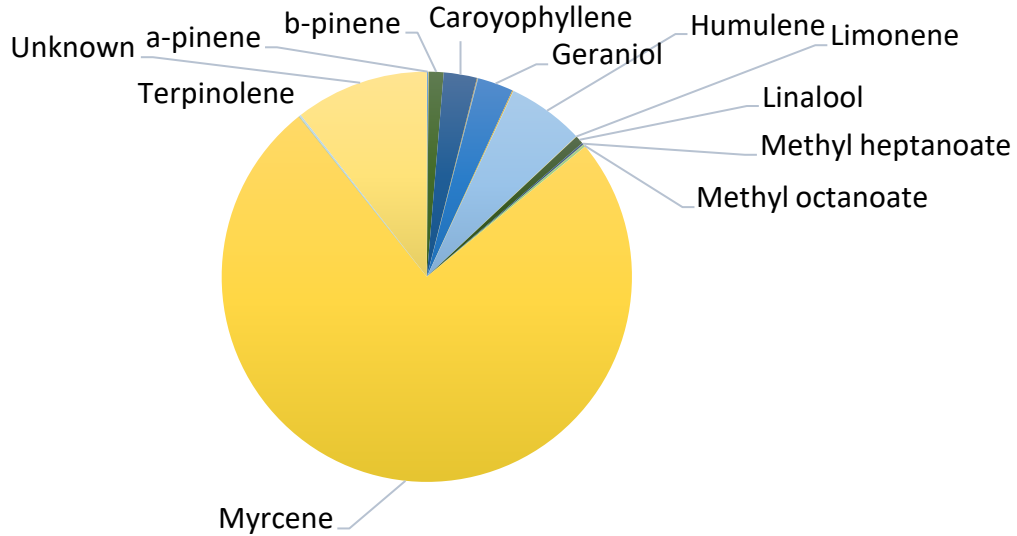
YAKIMA QUALITY HOPS

Testing completed by:




Hop Oil Composition

CoA ID	Date of Issue	Test Date
CEN-2400_Amended	10/28/2024	10/16/2024
Sample Type	Variety	Total Oil (mL/100g)
T90 Pellet	Centennial	2.1
HopTechnic-116 (Total Oil Distillation, ASBC Hops-16)		
HopTechnic-116 (Terpenes Composition Analysis by GC-FID, modified ASBC Hops-17)		



Aroma Compound	% of Total Oil
2-Undecanone	0.00%
a-pinene	0.11%
B-ionone	0.04%
b-pinene	1.17%
Caryophyllene	2.62%
Caryophyllene oxide	0.05%
Citral	0.00%
Citronellene	0.04%
Citronellol	0.00%
Farnesene	0.01%
Geraniol	2.81%
Geranyl acetate 1	0.08%
Geranyl acetate 2	0.03%

Aroma Compound	% of Total Oil
Humulene	6.05%
Limonene	0.03%
Linalool	0.67%
Methyl Heptanoate	0.13%
Methyl Laurate	0.03%
Methyl Octanoate	0.18%
Methyl thiohexanoate	0.01%
Myrcene	75.23%
Nerol	0.00%
Nerolidol 1	0.03%
Nerolidol 2	0.00%
Ocimene	0.05%
Terpinolene	0.11%
Unidentified	10.53%

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