

# CERTIFICATE OF ANALYSIS

BATCH NO.:  
PE01626

VARIETY  
Cascade

CROP YEAR:  
2023

**Description**

Hop Pellets are produced from raw hops and can be added to the kettle to provide bitterness and a hop character that is indistinguishable from that achieved using raw hops. Hop Pellets provide improved homogeneity, better storage stability and reduced storage/transport costs compared to raw hops.

**Storage**

Hop Pellets should be stored cool at 0 – 5 °C (32 - 41 °F). Pellets are best used within 3 years after processing. If stored at – 20 °C (-4 °F), pellets should be used within 5 years. Foils, once opened, use within a few days.

**Chemical Analysis**

<u>Characteristic</u>	<u>Analysis Result</u>	<u>Method</u>
Alpha Acids	4.8 %	ASBC Hops-6A
Beta Acids	7.3 %	ASBC Hops-6A
HSI	0.309	ASBC Hops-12
Oil Content	0.9 ml/100g	ASBC Hops-13
Moisture	9.4 %	ASBC Hops-4
Beta-pinene	< 1 %	ASBC Hops-17
Caryophyllene	8.3 %	ASBC Hops-17
Citronellol	< 1 %	ASBC Hops-17
Farnesene	< 1 %	ASBC Hops-17
Geraniol	2.0 %	ASBC Hops-17
Humulene	29.1 %	ASBC Hops-17
Limonene	< 1 %	ASBC Hops-17
Linalool	< 1 %	ASBC Hops-17
Myrcene	38.2 %	ASBC Hops-17
Nerol	< 1 %	ASBC Hops-17

Pesticide residues are monitored in hop products under our new BarthHaas Quality Control Guarantee.  
For more information on this program, please visit our website at, [www.BarthHaas.com](http://www.BarthHaas.com).



**Released By:**

Hannah Eyerly, Senior Lab Technician

**Signature:**

**Date:**

February 7, 2024

**Additional Information:**

SQ000019889  
Production date: 24-Jan 2024  
Best by date: 24-Jan 2027

Grower lots:  
23-WA427-002,23-WA460-007,23-WA302-035,23-ID123-001,23-ID113-059

Manufactured by John I. Haas, Inc., a member of the BarthHaas Group. 1600 River Rd., Yakima, WA 98902 Telephone: (509) 469-4000