Certificate of analysis

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Certificate of analysis	ICA004794		
Product name	CRYSTAL TYPE 90 BULK-INT PELLETS US	Crop year	2025
Raw hop batches	25-WA302-028	Production date	16-Oct 2025
Finished good batch	PE04322	Best before date	16-Oct 2030

Notes

Type	Description	Note
CoA Note	Description	Type 90 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.
CoA Note	Storage	Type 90 Pellets should be stored cool at 0 – 5 °C (32 - 41 °F). Pellets are best used within 5 years after processing. Foils, once opened, should be used within a few days to avoid deterioration of bitter acids and essential oils.
CoA Note	Pesticide Statement	Pesticide residues are monitored in hop products under our BarthHaas Quality Guarantee. For more information on this program, please visit our website at, www.BarthHaas.com

Test	Unit	Test value	Reference method
HSI	--	0.307	ASBC Hops-12
Total Oil	mL/100g	0.8	ASBC Hops-13
Beta-pinene	%	0.5	ASBC Hops-17
Caryophyllene	%	9.8	ASBC Hops-17
Citronellol	%	1.8	ASBC Hops-17
Farnesene	%	0.1	ASBC Hops-17
Geraniol	%	0.9	ASBC Hops-17
Humulene	%	33.0	ASBC Hops-17
Limonene	%	0.1	ASBC Hops-17
Linalool	%	0.1	ASBC Hops-17
Myrcene	%	32.8	ASBC Hops-17
Nerol	%	0.3	ASBC Hops-17
Moisture Oven	%	7.2	ASBC Hops-4C
Alpha, Spectro	%	2.2	ASBC Hops-6A
Beta, Spectro	%	6.1	ASBC Hops-6A
Manufacturing Target	%	2.5	Calculated

Release by	Date
Hannah Eyerly, Sr Lab Tech	October 23, 2025 10:56:14 AM