



Certificate of analysis

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Certificate of analysis	ICA002710		
Product name	COLUMBUS TYPE 90 BULK-INT PELLETS US	Crop year	2024
Raw hop batches	24-WA420-115,24-WA460-095,	Production date	17-Oct 2024
Finished good batch	PE02628	Best before date	17-Oct 2029

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.

Test	Unit	Test value	Reference method
HSI	--	0.323	ASBC Hops-12
Total Oil	mL/100g	3.0	ASBC Hops-13
Beta-pinene	%	0.7	ASBC Hops-17
Caryophyllene	%	8.4	ASBC Hops-17
Citronellol	%	2.7	ASBC Hops-17
Farnesene	%	0.2	ASBC Hops-17
Geraniol	%	0.7	ASBC Hops-17
Humulene	%	13.1	ASBC Hops-17
Limonene	%	0.2	ASBC Hops-17
Linalool	%	0.5	ASBC Hops-17
Myrcene	%	40.8	ASBC Hops-17
Nerol	%	0.4	ASBC Hops-17
Moisture Oven	%	9.6	ASBC Hops-4C
Alpha, Spectro	%	14.6	ASBC Hops-6A
Beta, Spectro	%	5.0	ASBC Hops-6A

Release by	Date
Hannah Eyerly, Sr Lab Tech	November 21, 2024 4:45:07 PM