



# FREESTYLE HOPS

NEW ZEALAND GROWN

## CERTIFICATE OF ANALYSIS

### ORIGIN

CLAYTON HOPS LTD : KORERE FARM

TAPAWERA, Tasman District, New Zealand

### ANALYSIS

Variety	Motueka
Lot ID	CH21-KE02-MKA
Harvest Date	8-12th March 2021
Alpha Acids (%)	8.0
Beta Acids (%)	5.9
Hop Storage Index	0.26
Original Analysis	April 2021



### Method(s) of Analysis:

ASBC Hops - 6a:  $\alpha$ -and  $\beta$ -Acids in Hops and Hop Pellets - spectrophotometric method

EBC 7.7:  $\alpha$ -and  $\beta$ -Acids in hops by HPLC

NIRS:  $\alpha$ -and  $\beta$ -Acids in hops by Sagitto Ltd near-infrared spectroscopy method

ASBC Hops - 13: Total Essential Oils in Hops and Hop Pellets by Steam Distillation

ASBC Hops - 12: Hop Storage Index

NIRS: HSI, oil content and moisture in hops by Sagitto Ltd near-infrared spectroscopy method

Approved by: *Dave Dunbar*

Date: May 10, 2021

David Dunbar, Managing Director, Freestyle Hops LtdE