

Cluster Freshpak Hops Technical Specification

Authorised by: Tim Luckham Control classification: Public

Issue No.3

Country of origin USA

Characteristics Floral, Spicy, Blackberry

Typical Alpha Acid 6-9%

Typical Beta Acid <u>4-6%</u>

Typical Cohumulone <u>37-43</u>

Typical Oil Composition Myrcene: 38-55%, Humulene :15-20%, Farnesene: <1%

Typical Total Oil 0.7-1.3ml/100g

Flavour Intensity 6

Description - Hops are used to provide bitterness in beer. Hop pellets are whole hop cones which have been cleaned, dried, milled into a powder, blended and compressed through a die.

Analysis - Alpha-acids harvest values supplied. Analysis conducted by Lead Conductance (LCV) Moisture < 12%

Physical Diameter 6mm / Length 5 – 15mm

Aroma Typical varietal hop aroma

GRAS Status Recognised as safe

Pesticide and Heavy Metal Residues - Conforms to current EU and US FDA regulations

Packaging / Storage / Best before Date

Pellets are packed in 5 or 10kg packs, in food grade packaging incorporating an oxygen barrier. The packs are flushed with an inert gas. Storage should be cool (5°C) away from direct sunlight or heat sources. Best before Date in un-opened packaging is 5 years from harvest when stored cool. Once opened product should be used within a few days to avoid any deterioration.

Other

Type 90 Hop Pellets fully meets UK and EU food safety legislation, regulations and directives as they apply to hops and hop products. It is classified by the FDA as a hop product which may be safely used in the manufacture of beer (in accordance with 21 CFR 182 20).

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Quality Manager – Tim Luckham Sign -