



# Bullion UK Freshpak Hops Technical Specification

Document No:  
QA 309  
Date:12/12/2022

Authorised by: Tim Luckham  
Control classification: Public

Issue No.3

**Country of origin** UK

**Characteristics** Blackcurrant, Damson, Spicy

**Typical Alpha Acid** 8-11%

**Typical Beta Acid** 4-6%

**Typical Cohumulone** 35-40

**Typical Oil Composition** Myrcene: 40-55%, Humulene: 20-30%, Farnesene: <1%

**Typical Total Oil** 1.0-2.7ml/100g

**Flavour Intensity** 7

**Description** - Hops are used to provide bitterness in beer. whole hop cones which have been cleaned, dried.

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

**Physical** Hop Cones

**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**

Freshpak are packed in 5 or 20kg 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**

Freshpak Hops 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).

**Quality Manager** – Tim Luckham

**Sign** -