



*Belgian Malts that Make Your Beer So Special*

## **CHALLENGER**

### **BREWING QUALITY**

An excellent all-round hop with good alpha and aroma properties. As the main copper hop, it provides a refreshing, full bodied, rounded bitterness, which makes an excellent platform for a late hop. As the late addition, it can give a very crisp, fruity character which has proved very popular in many beers.



### **ORIGIN / HISTORY**

UK origin. Introduced by Wye College in 1972.

### **AGRONOMICS**

Good resistance to downy mildew but is susceptible to powdery mildew and Verticillium Wilt.

### **ACID COMPONENTS**

Alpha Acids	5 – 9% w/w
Beta Acids	3.2 – 5% w/w
Cohumulone	20 – 30% of alpha acids

**T90 Hop Pellets**



### **OIL COMPONENTS**

Total Oil	1.0 – 1.5 mls/100 grams
Caryophyllene	8-12% of whole oil
Farnesene	1-3% of whole oil
Humulene	25-32% of whole oil
Myrcene	20-42% of total oil

**Leaf Hops**



**Possible Substitutions:** Northdown, Northern Brewer, First Gold, Perle



# **Castle Malting - True Brewers know why!**

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