

## Belgian Malts that Make Your Beer So Special

## **VANGUARD**

#### **BREWING QUALITY**

Provides excellent aromatic notes, along with a very low cohumulone content. Used in Lager, Pilsner, Bock, Kölsch, Wheat, Munich Helles, Belgian-Style Ales.





#### **ORIGIN / HISTORY**

USA origin. A triploid hop, similar to Hallertauer Mittelfrüh.

#### **AGRONOMICS**

Resistance to hop downy mildew similar to that of the cultivars Nugget and Willamette.

#### **ACID COMPONENTS**

Alpha Acids 5 - 7% w/w Beta Acids 6 - 7% w/w

Cohumulone 14 - 16% of alpha acids



### OIL COMPONENTS

Total Oil 0.9 – 1.2 mls/100 grams
Caryophyllene 12 - 14% of whole oil
Farnesene <1% of whole oil
Humulene 45 - 50% of whole oil
Myrcene 25 - 35% of whole oil

**Type Leaf Hops** 



Possible Substitutions: Hersbrucker, Mount Hood, Liberty



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