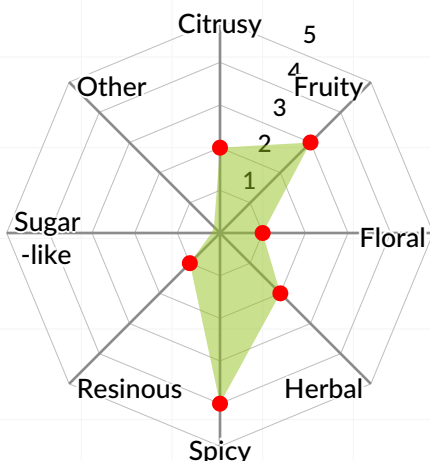


AROMA EVALUATION



VISUAL EVALUATION



AROMA SPECIFICATION

fruity, apple, pepper

GENETIC ORIGIN

A Galena cross (751513M) originating in Germany, released in 1993.

AGRONOMIC ASPECTS

GROWING

Yield (kg/ha)	1,700 - 2,100
Yield (lbs/acre)	1,500 - 1,900
Maturity	Late
Main Growing Country	Germany
Acreage (ha)	2200

RESISTANCE AGAINST DISEASES

Wilt diseases	Resistant
Downy mildew	Resistant
Powdery mildew	Susceptible
Aphid	Susceptible

CHEMICAL INGREDIENTS

BITTER COMPONENTS

Alpha-Acid %	11.0 - 16.0
Beta-Acid %	5.0 - 7.0
Co-Humulone % rel.	21 - 29
Hard Resins : Alpha-Acid	0.11 - 0.29

POLYPHENOLS

Total Polyphenols	2.6
Xanthohumol (EBC 7.7)	0.4 - 0.5

AROMA COMPONENTS

Total Oils (ml/100g)	1.9 - 2.8
Beta-Caryophyllene: Humulene	0.20 - 0.30
Farnesene % of total Oil	0.00 - 1.00
Linalool % of total Oil	0.2 - 0.3
Linalool: Alpha-Acid	0.01 - 0.02

HOP ALTERNATIVES

BREWHOUSE

Hallertauer Taurus, Herkules, Hallertauer Merkur

HOPS HOTLINE
800.339.8710