

# OPAL

## VARIETY INFORMATION



[www.hopsteiner.com](http://www.hopsteiner.com)

Genetic Origin	
New variety bred in Huell	

### Agronomic Aspects

Growing	
Classification	Aroma
Yield (kg/ha)	1,500 - 2,200
Maturity	Medium Early
Main growing country	Germany
Acreage (ha)	141
Resistance against Diseases	
Wilt diseases	Resistant
Downy mildew	Resistant
Powdery mildew	Resistant
Aphid	Tolerant

### Chemical Ingredients

Bitter Components	
Alpha acid %	5.0 - 8.0
Beta acid %	3.5 - 5.5
Cohumulone % rel.	15 - 17
Hard resins : alpha acid	0.17 - 0.69
Polyphenoles	
Total polyphenoles	3.7
Xanthohumol	0.3 - 0.5
Aroma Components	
Total oils (ml/100g)	0.8 - 1.3
Beta-caryophyllene: Humulene	0.30 - 0.39
Farnesene % of total oil	0.0 - 1.0
Linalool % of total oil	1.0 - 1.5
Linalool : Alpha acid	0.19 - 0.20

### Aroma Evaluation (Smell of Raw Hops, 0-5)

Aroma Specification	herbal, pepper, grass, aniseed				
Fruity	0.5	1.0	1.5	2.0	2.5
Floral	0.5	1.0	1.5	2.0	2.5
Citrusy	0.5	1.0	1.5	2.0	2.5
Spicy	0.5	1.0	1.5	2.0	2.5
Earthy / resinous	0.5	1.0	1.5	2.0	2.5
Herbal	0.5	1.0	1.5	2.0	2.5
Sugar-like	0.5	1.0	1.5	2.0	2.5

### Substitutes

Brewhouse	Dry Hopping
Smaragd	Smaragd

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