

## #72 Black IPA SH Hallertau Blanc

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **58**
- SRM **39.3**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **10.55 liter(s)**
- Trub loss **4 %**
- Size with trub loss **11.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.8 liter(s)**

### Mash information

- Mash efficiency **76 %**
- Liquor-to-grist ratio **3.95 liter(s) / kg**
- Mash size **13.1 liter(s)**
- Total mash volume **16.4 liter(s)**

### Steps

- Temp **64 C**, Time **40 min**
- Temp **72 C**, Time **35 min**
- Temp **77 C**, Time **1 min**

### Mash step by step

- Heat up **13.1 liter(s)** of strike water to **69.6C**
- Add grains
- Keep mash **40 min** at **64C**
- Keep mash **35 min** at **72C**
- Keep mash **1 min** at **77C**
- Sparge using **4 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.04 kg (61.6%)	80 %	5
Grain	Pszeniczny	0.5 kg (15.1%)	85 %	4
Grain	Abbey Malt Weyermann	0.24 kg (7.3%)	75 %	45
Grain	Jęczmień niesłodowany	0.19 kg (5.7%)	75 %	2
Grain	Strzegom Barwiący	0.34 kg (10.3%)	68 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Hallertau Blanc	7 g	50 min	8.9 %
First Wort	lunga	15 g	50 min	9.5 %
Aroma (end of boil)	Hallertau Blanc	20 g	8 min	8.9 %
Whirlpool	Hallertau Blanc	23.3 g	15 min	8.9 %
Dry Hop	Hallertau Blanc	50 g	3 day(s)	8.9 %

### Yeasts

Name	Type	Form	Amount	Laboratory
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FM52 Amerykański Sen	Ale	Liquid	30 ml	Fermentum Mobile
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