

# Black IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **62**
- SRM **22.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **12.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **15.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.7 liter(s)**
- Total mash volume **14.2 liter(s)**

## Steps

- Temp **66 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **10.7 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **30 min** at **66C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **78C**
- Sparge using **8.1 liter(s)** of **76C** water or to achieve **15.2 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.2 kg (33.8%)	80 %	5
Grain	Pilznieński	1 kg (28.2%)	81 %	4
Grain	Pszeniczny	0.8 kg (22.5%)	85 %	4
Grain	Oats, Flaked	0.2 kg (5.6%)	80 %	2
Grain	Caramel/Crystal Malt - 60L	0.1 kg (2.8%)	74 %	118
Grain	Weyermann - Chocolate Wheat	0.25 kg (7%)	74 %	788

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	20 g	60 min	13.5 %
Boil	Enigma (AUS)	10 g	15 min	17.2 %
Whirlpool	Enigma (AUS)	40 g	1 min	17.2 %
Dry Hop	Galaxy	50 g	2 day(s)	15 %
Dry Hop	falconers flight	50 g	2 day(s)	10 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Mangrove Jack's M44 US West Coast	Ale	Dry	10 g	Mangrove Jack's

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Water Agent	gips	4 g	Mash	60 min
Fining	whirflock	1 g	Boil	5 min