

# Black AIPA

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- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **73**
- SRM **30.3**
- Style **Black IPA**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **110 min**
- Evaporation rate **10 %/h**
- Boil size **28.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **16.5 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**
- Temp **67 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **16.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **15 min** at **67C**
- Keep mash **90 min** at **67C**
- Keep mash **5 min** at **78C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **28.4 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4.6 kg (83.6%)	80 %	5
Grain	Strzegom Czekoladowy 400	0.4 kg (7.3%)	68 %	400
Grain	Chocolate Malt (UK)	0.3 kg (5.5%)	73 %	887
Grain	Carafa II	0.2 kg (3.6%)	70 %	812

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Bravo	25 g	60 min	15.5 %
Boil	Dr Rudi	25 g	40 min	11.8 %
Boil	Cascade	15 g	15 min	6 %
Aroma (end of boil)	Cascade	15 g	5 min	6 %
Aroma (end of boil)	Cascade	20 g	1 min	6 %
Aroma (end of boil)	Centennial	25 g	1 min	10.5 %
Dry Hop	Centennial	25 g	5 day(s)	10.5 %
Dry Hop	Cascade	30 g	5 day(s)	6 %

## Yeasts

<b>Name</b>	<b>Type</b>	<b>Form</b>	<b>Amount</b>	<b>Laboratory</b>
Safale S-04	Ale	Dry	11.5 g	Safale

### **Extras**

<b>Type</b>	<b>Name</b>	<b>Amount</b>	<b>Use for</b>	<b>Time</b>
Water Agent	gips piwowarski	5 g	Mash	110 min
Fining	Whirlfloc	2.5 g	Boil	15 min