

## Black IPA AU + NZL

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- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **43**
- SRM **32.9**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **19 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.9 liter(s)**
- Boil time **105 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

### Mash information

- Mash efficiency **67 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

### Steps

- Temp **61 C**, Time **30 min**
- Temp **74 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

### Mash step by step

- Heat up **19.2 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **30 min** at **61C**
- Keep mash **60 min** at **74C**
- Keep mash **10 min** at **78C**
- Sparge using **14 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (72.5%)	80 %	5
Grain	Viking Pilsner malt	0.5 kg (7.2%)	82 %	4
Liquid Extract	Pszeniczny	0.5 kg (7.2%)	85 %	10
Grain	Viking Czekoladowy ciemny	0.3 kg (4.3%)	67 %	1200
Grain	płatki jęczmienne	0.4 kg (5.8%)	70 %	4
Grain	Strzegom pszenica prażona	0.2 kg (2.9%)	70 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galaxy	12 g	60 min	15.8 %
Boil	Galaxy	15 g	30 min	15.8 %
Aroma (end of boil)	Galaxy	20 g	6 min	15.8 %
Aroma (end of boil)	Galaxy	41 g	0 min	15.8 %
Dry Hop	Wai-iti	30 g	8 day(s)	1.4 %
Dry Hop	Wai-iti	30 g	3 day(s)	1.4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04 gęstwa	Ale	Slant	200 ml	Fermentis

## Extras

Type	Name	Amount	Use for	Time
Water Agent	gips	3 g	Boil	60 min