

Black IPA

- Gravity **17.1 BLG**
- ABV **7.3 %**
- IBU ---
- SRM **18**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **10 %**
- Size with trub loss **25.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.3 liter(s)**

Mash information

- Mash efficiency **83 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **29.8 liter(s)**

Steps

- Temp **61 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **75 C**, Time **5 min**

Mash step by step

- Heat up **22.4 liter(s)** of strike water to **67.8C**
- Add grains
- Keep mash **60 min** at **61C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **75C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **30.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (67.1%)	80 %	5
Grain	Strzegom Czekoladowy 400	0.3 kg (4%)	68 %	400
Grain	Jęczmień palony	0.15 kg (2%)	55 %	985
Grain	Pszeniczny	1 kg (13.4%)	85 %	4
Grain	Płatki owsiane	0.5 kg (6.7%)	85 %	3
Grain	Biscuit Malt	0.5 kg (6.7%)	79 %	45

Hops

Use for	Name	Amount	Time	Alpha acid
Mash	Marynka	30 g	60 min	10 %
Mash	Citra	100 g	5 min	12 %
Whirlpool	Mosaic	50 g	---	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Wyeast - American Ale II	Ale	Liquid	250 ml	Wyeast Labs

Extras

Type	Name	Amount	Use for	Time
Flavor	Zest z pomarańczy	150 g	Secondary	5 day(s)