

Black IPA

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **52**
- SRM **33.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **13.2 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **11.4 liter(s)**
- Total mash volume **14.6 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **74 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **11.4 liter(s)** of strike water to **70.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **74C**
- Keep mash **5 min** at **78C**
- Sparge using **5.1 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.4 kg (73.8%)	80 %	5
Grain	Pszeniczny	0.25 kg (7.7%)	85 %	4
Grain	Barwiący	0.25 kg (7.7%)	55 %	985
Grain	płatki jęczmienne	0.2 kg (6.2%)	60 %	4
Grain	Strzegom Karmel 600	0.15 kg (4.6%)	68 %	601

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Lunga	10 g	60 min	12.5 %
Boil	Mosaic	5 g	30 min	10 %
Boil	Citra	5 g	30 min	13 %
Boil	Citra	5 g	15 min	13 %
Boil	Mosaic	5 g	15 min	10 %
Aroma (end of boil)	Mosaic	5 g	0 min	10 %
Aroma (end of boil)	Citra	5 g	0 min	13 %
Dry Hop	Citra	20 g	4 day(s)	13 %

Dry Hop	Mosaic	20 g	4 day(s)	10 %
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Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	100 ml	---