

BLACK IPA

- Gravity **17.3 BLG**
- ABV **7.4 %**
- IBU **76**
- SRM **35.9**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **28.2 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **2.9 liter(s) / kg**
- Mash size **21.8 liter(s)**
- Total mash volume **29.3 liter(s)**

Steps

- Temp **67 C**, Time **75 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **21.8 liter(s)** of strike water to **75.1C**
- Add grains
- Keep mash **75 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **13.9 liter(s)** of **76C** water or to achieve **28.2 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (66.7%)	80 %	5
Grain	Strzegom Pilzneński	0.5 kg (6.7%)	80 %	4
Grain	Monachijski	1 kg (13.3%)	80 %	16
Grain	Strzegom Karmel 300	0.4 kg (5.3%)	70 %	300
Grain	Carafa III	0.3 kg (4%)	70 %	1034
Grain	słód chocolate	0.3 kg (4%)	60 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Waimea	20 g	60 min	17 %
Boil	Citra	25 g	30 min	14 %
Boil	Mosaic	25 g	15 min	10 %
Boil	Simcoe	25 g	10 min	13.2 %
Boil	Citra	25 g	5 min	14 %
Dry Hop	Simcoe	50 g	7 day(s)	13.2 %

Yeasts

Name	Type	Form	Amount	Laboratory
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Safale US-05	Ale	Slant	400 ml	Fermentis
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