

Black IPA

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **94**
- SRM **28.5**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **25.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.3 liter(s)**
- Total mash volume **24.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **60 min**

Mash step by step

- Heat up **18.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **60 min** at **72C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (78.1%)	80 %	4
Grain	Weyermann - Dehusked Carafo II	0.5 kg (7.8%)	70 %	837
Grain	Abbey Castle	0.15 kg (2.3%)	80 %	45
Grain	Carahell	0.2 kg (3.1%)	77 %	26
Sugar	Brown Sugar, Dark	0.3 kg (4.7%)	100 %	99
Grain	Special B Malt	0.25 kg (3.9%)	65.2 %	315

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	25 g	60 min	12.9 %
Boil	Centennial	25 g	45 min	9.5 %
Aroma (end of boil)	Admiral	25 g	30 min	13.3 %
Aroma (end of boil)	Equinox	37 g	12 min	13.1 %
Whirlpool	Centennial	50 g	0 min	9.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	500 ml	Fermentis