

Black Ipa

- Gravity **14.6 BLG**
- ABV ---
- IBU **92**
- SRM **40**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **24 liter(s)**
- Trub loss **5 %**
- Size with trub loss **25.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **72 C**, Time **10 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **19.8 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	5 kg (75.8%)	79 %	6
Grain	Carafa II	0.7 kg (10.6%)	70 %	812
Grain	Biscuit Malt	0.2 kg (3%)	79 %	45
Grain	Strzegom Karmel 150	0.5 kg (7.6%)	75 %	150
Grain	Carahell	0.2 kg (3%)	77 %	26

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Summit	50 g	60 min	17 %
Aroma (end of boil)	Cascade	50 g	15 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-05	Ale	Dry	11 g	Safale

Extras

Type	Name	Amount	Use for	Time
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Flavor	płatki owsiane	300 g	Mash	50 min
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