

Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **48**
- SRM **35.3**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **20.1 liter(s)**
- Total mash volume **26.8 liter(s)**

Steps

- Temp **62 C**, Time **60 min**
- Temp **70 C**, Time **20 min**

Mash step by step

- Heat up **20.1 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **20 min** at **70C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	6 kg (89.6%)	80 %	7
Grain	Barwiący	0.7 kg (10.4%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.3 %
Boil	Cascade	20 g	30 min	6.8 %
Boil	Cascade	30 g	15 min	6.8 %
Aroma (end of boil)	Equinox	50 g	5 min	16.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Dry	11 g	Danstar