

Black IPA Single Hop

- Gravity **15.2 BLG**
- ABV **6.3 %**
- IBU **61**
- SRM **34.3**
- 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 liter(s) / kg**
- Mash size **9.8 liter(s)**
- Total mash volume **13 liter(s)**

Steps

- Temp **67 C**, Time **50 min**
- Temp **72 C**, Time **10 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **9.8 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **50 min** at **67C**
- Keep mash **10 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **6.7 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	3 kg (92.3%)	80 %	5
Grain	Viking Barwiący	0.25 kg (7.7%)	65 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	24.7 %
Aroma (end of boil)	Simcoe	15 g	5 min	24.7 %
Dry Hop	Simcoe	25 g	4 day(s)	24.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - BRY-97	Ale	Dry	11 g	Danstar