

Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **67**
- SRM **36**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **12 %/h**
- Boil size **16.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.4 liter(s)**
- Total mash volume **17.9 liter(s)**

Steps

- Temp **55 C**, Time **0 min**
- Temp **64 C**, Time **60 min**
- Temp **70 C**, Time **15 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **13.4 liter(s)** of strike water to **60.9C**
- Add grains
- Keep mash **0 min** at **55C**
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **70C**
- Keep mash **5 min** at **76C**
- Sparge using **7.9 liter(s)** of **76C** water or to achieve **16.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3.8 kg (84.8%)	82 %	4
Grain	Biscuit Malt	0.23 kg (5.1%)	79 %	45
Grain	Carafa III	0.45 kg (10%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	15 g	60 min	11 %
Aroma (end of boil)	Mosaic	35 g	10 min	10 %
Aroma (end of boil)	Simcoe	35 g	10 min	13.2 %
Whirlpool	Mosaic	25 g	0 min	10 %
Whirlpool	Simcoe	25 g	0 min	13.2 %
Dry Hop	Mosaic	40 g	3 day(s)	10 %
Dry Hop	Simcoe	40 g	3 day(s)	13.2 %
Dry Hop	Cascade	20 g	3 day(s)	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Hazy Daze	Ale	Slant	150 ml	---