

Black IPA III

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **44**
- SRM **38**
- Style **Black IPA**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **13 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **23.9 liter(s)**
- Total mash volume **31.8 liter(s)**

Steps

- Temp **66 C**, Time **65 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **23.9 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **65 min** at **66C**
- Keep mash **5 min** at **78C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	7 kg (88.1%)	80 %	5
Grain	Strzegom Karmel 300	0.4 kg (5%)	70 %	299
Grain	Weyermann - Carafa III Special	0.55 kg (6.9%)	1 %	1300

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	30 g	60 min	16.1 %
Aroma (end of boil)	Sorachi Ace	150 g	0 min	13.3 %
Dry Hop	Sorachi Ace	150 g	3 day(s)	13.3 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	23 g	Fermentis