

## BLACK IPA #3

---

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **81**
- SRM **32.6**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **18.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **19.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **23.4 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.4 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**

### Mash step by step

- Heat up **17.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **11.8 liter(s)** of **76C** water or to achieve **23.4 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (85.5%)	80 %	5
Grain	Weyermann - Carafa II	0.5 kg (8.5%)	70 %	1100
Grain	Weyermann - Melanoiden Malt	0.25 kg (4.3%)	81 %	53
Grain	Strzegom Karmel 150	0.1 kg (1.7%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	38 g	60 min	12.8 %
Aroma (end of boil)	Eldorado	50 g	15 min	11.1 %

### Yeasts

Name	Type	Form	Amount	Laboratory
US-05	Ale	Dry	11.5 g	---