

## Black IPA

- Gravity **15.7 BLG**
- ABV **6.6 %**
- IBU **65**
- SRM **29.1**
- 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 **9.9 liter(s)**
- Total mash volume **13.2 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **10 min**

### Mash step by step

- Heat up **9.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **10 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **13.2 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Castle Pale Ale	3 kg (90.9%)	80 %	8
Grain	Carahell	0.1 kg (3%)	77 %	26
Grain	Weyermann - Carafa III	0.2 kg (6.1%)	70 %	1300

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	10 g	60 min	11.5 %
Boil	Galaxy	15 g	30 min	15.5 %
Boil	Mosaic	10 g	5 min	10.4 %
Boil	Simcoe	15 g	5 min	11.5 %
Dry Hop	Galaxy	15 g	2 day(s)	15.5 %
Dry Hop	Mosaic	10 g	2 day(s)	10.4 %

### Yeasts

Name	Type	Form	Amount	Laboratory
S-05	Ale	Dry	6 g	---

### Notes

- o 50 g więcej carafy jak chce sie troszke podbic palonosc  
*Jan 16, 2019, 9:28 PM*