

## Black IPA (Citra Galaxy)

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **66**
- SRM **28.4**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **27 liter(s)**

### Steps

- Temp **70 C**, Time **60 min**

### Mash step by step

- Heat up **21 liter(s)** of strike water to **77.1C**
- Add grains
- Keep mash **60 min** at **70C**
- Sparge using **11.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (83.3%)	80 %	5
Grain	Słód pszeniczny Bestmalz	0.5 kg (8.3%)	82 %	5
Grain	Weyermann - Dehusked Carafa III	0.5 kg (8.3%)	70 %	1024

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	lunga	15 g	60 min	11 %
Whirlpool	Galaxy	50 g	30 min	15 %
Whirlpool	Citra	50 g	30 min	12 %
Dry Hop	Galaxy	100 g	2 day(s)	15 %
Dry Hop	Citra	100 g	2 day(s)	12 %

### Yeasts

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