

## Black IPA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **58**
- SRM **27.8**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **18 liter(s)**
- Trub loss **5 %**
- Size with trub loss **18.9 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **22.8 liter(s)**

### Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **23.8 liter(s)**
- Total mash volume **29.8 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	5 kg (80.6%)	80 %	4
Grain	Strzegom Karmel 150	0.15 kg (2.4%)	75 %	150
Grain	Biscuit Malt	0.3 kg (4.8%)	79 %	45
Grain	Carafa II	0.5 kg (8.1%)	70 %	812
Sugar	cukier brązowy	0.25 kg (4%)	--- %	---

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Chinook	40 g	60 min	6.2 %
Boil	Fuggles	25 g	15 min	5.9 %
Boil	Simcoe	30 g	15 min	12.6 %
Boil	Cascade PL	10 g	15 min	5.2 %
Aroma (end of boil)	Chinook	25 g	1 min	6.2 %
Aroma (end of boil)	Fuggles	25 g	1 min	5.9 %

### Yeasts

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