

## black ipa rakau single hop

- Gravity **18.2 BLG**
- ABV **7.8 %**
- IBU **48**
- SRM **39.9**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.2 liter(s)**
- Total mash volume **25.6 liter(s)**

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (62.5%)	80 %	5
Grain	Strzegom Wiedeński	1 kg (15.6%)	79 %	10
Grain	Special B Malt	0.5 kg (7.8%)	65.2 %	315
Grain	Simpsons - Coffee Malt	0.3 kg (4.7%)	74 %	296
Grain	Carafa III	0.2 kg (3.1%)	70 %	1034
Grain	Barwiący	0.4 kg (6.3%)	55 %	985

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Rakau (NZ)	10 g	60 min	9.5 %
Boil	Rakau (NZ)	40 g	25 min	9.5 %
Boil	Rakau (NZ)	30 g	15 min	9.5 %
Boil	Rakau (NZ)	20 g	5 min	9.5 %
Dry Hop	Rakau (NZ)	100 g	4 day(s)	9.5 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Liquid	100 ml	FM

### Extras

Type	Name	Amount	Use for	Time
Herb	mech irlandzki	10 g	Boil	15 min
Water Agent	gips	10 g	Boil	60 min