

## black ipa sabro

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- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **65**
- SRM **24.5**
- Style **Black IPA**

### Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **5 %/h**
- Boil size **27.9 liter(s)**

### Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

### Steps

- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

### Mash step by step

- Heat up **18.8 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.9 liter(s)** of wort

### Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5.5 kg (88%)	80 %	5
Grain	Strzegom Barwiący	0.25 kg (4%)	68 %	1300
Grain	Strzegom Czekoladowy jasny	0.25 kg (4%)	68 %	400
Grain	Strzegom Karmel 150	0.25 kg (4%)	75 %	150

### Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Sabro	35 g	60 min	15 %
Whirlpool	Sabro	30 g	30 min	15 %
Dry Hop	Sabro	35 g	2 day(s)	15 %

### Yeasts

Name	Type	Form	Amount	Laboratory
FM53 Voss kveik	Ale	Slant	200 ml	FM