

Black Ipa z Kotłowni

- Gravity **15.4 BLG**
- ABV ---
- IBU **72**
- SRM **37.9**
- 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 **68 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **21 liter(s)**
- Total mash volume **28 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (71.4%)	80 %	5
Grain	Pszeniczny	1 kg (14.3%)	85 %	4
Grain	Viking Barwiący	0.3 kg (4.3%)	65 %	1400
Grain	Strzegom Czekoladowy ciemny	0.3 kg (4.3%)	68 %	1200
Grain	płatki jęczmienne	0.4 kg (5.7%)	60 %	4

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Ekuanot	30 g	90 min	14 %
Aroma (end of boil)	Centennial	30 g	15 min	10.5 %
Whirlpool	Mosaic	50 g	15 min	10 %
Dry Hop	Simcoe	100 g	3 day(s)	13.2 %
Dry Hop	Mosaic	50 g	3 day(s)	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	33 g	Fermentis