

Czarny Baran

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **26**
- SRM **34.9**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **20.7 liter(s)**
- Total mash volume **26.6 liter(s)**

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	2.5 kg (42.4%)	80 %	6
Grain	Płatki owsiane	0.8 kg (13.6%)	60 %	7
Grain	Cara Crisp	1 kg (16.9%)	78 %	30
Grain	Brown Crisp	0.4 kg (6.8%)	70 %	135
Grain	Crystal Medium Crisp	0.4 kg (6.8%)	71 %	270
Grain	Crystal Dark Crisp	0.4 kg (6.8%)	71 %	450
Grain	Chocolate Crisp	0.4 kg (6.8%)	25 %	1000

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Oktawia	45 g	60 min	5.7 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	Fermentis

Extras

Type	Name	Amount	Use for	Time
Fining	mech irlandzki	5 g	Boil	15 min