

# czarno brazowy kot

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **56**
- SRM **25.5**
- Style **Brown Porter**

## 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 **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **23.4 liter(s)**

## Steps

- Temp **69 C**, Time **60 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **77.2C**
- Add grains
- Keep mash **60 min** at **69C**
- Sparge using **13.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann Specjal W	0.6 kg (10.3%)	68 %	300
Grain	Viking Pale Ale malt	5 kg (85.5%)	80 %	5
Grain	Jęczmień palony	0.25 kg (4.3%)	55 %	985

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Galena	20 g	60 min	12 %
Boil	Summit	15 g	60 min	17 %
Boil	Summit	5 g	10 min	17 %
Boil	Cascade	10 g	10 min	6 %
Dry Hop	Summit	10 g	7 day(s)	17 %
Dry Hop	Cascade	20 g	7 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	10.5 g	---