

Czarna ziemia na grubo

- Gravity **21.1 BLG**
- ABV **9.4 %**
- IBU **60**
- SRM **60.8**
- Style **Russian Imperial Stout**

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 **13 %/h**
- Boil size **26 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **27 liter(s)**
- Total mash volume **36 liter(s)**

Steps

- Temp **67 C**, Time **55 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **27 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **55 min** at **67C**
- Keep mash **5 min** at **76C**
- Sparge using **8 liter(s)** of **76C** water or to achieve **26 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pilsen Malt	5 kg (55.6%)	80.5 %	2
Grain	Briess - Chocolate Malt	1 kg (11.1%)	60 %	690
Grain	smoked wheat malt	2 kg (22.2%)	80.5 %	6
Grain	Weyermann - Chocolate Wheat	0.5 kg (5.6%)	74 %	788
Grain	Carafa III	0.5 kg (5.6%)	70 %	1034

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Iunga	50 g	60 min	12.5 %
Boil	Lublin (Lubelski)	30 g	15 min	3.5 %
Boil	Chinook	7 g	60 min	12 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	1000 ml	Safale

Extras

Type	Name	Amount	Use for	Time
Spice	pu-erth	200 g	Secondary	2 day(s)