

Dolny Czarnuch carafa

- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **26**
- SRM **14.7**
- Style **Schwarzbier**

Batch size

- Expected quantity of finished beer **36 liter(s)**
- Trub loss **10 %**
- Size with trub loss **43.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **53.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **29.1 liter(s)**
- Total mash volume **38.8 liter(s)**

Steps

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

Mash step by step

- Heat up **29.1 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **60 min** at **66C**
- Sparge using **34.4 liter(s)** of **76C** water or to achieve **53.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	7 kg (72.2%)	82 %	4
Grain	Strzegom Monachijski typ II	2 kg (20.6%)	79 %	22
Grain	Carafa II	0.4 kg (4.1%)	70 %	812
Grain	Karmelowy Jasny 30EBC	0.3 kg (3.1%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	30 g	60 min	12 %
Boil	Magnum	20 g	15 min	12 %