

Belgijska Czarna Dziura

- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **23**
- SRM **30.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.5 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **31.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **16.3 liter(s)**
- Total mash volume **22.8 liter(s)**

Steps

- Temp **64 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **1 min**

Mash step by step

- Heat up **16.3 liter(s)** of strike water to **72.8C**
- Add grains
- Keep mash **50 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **1 min** at **78C**
- Sparge using **22.1 liter(s)** of **76C** water or to achieve **31.9 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	4 kg (61.5%)	80 %	5
Grain	Pszeniczny	1 kg (15.4%)	85 %	4
Grain	Żytni	0.5 kg (7.7%)	85 %	8
Grain	Fawcett - Pale Chocolate	0.7 kg (10.8%)	71 %	600
Grain	Jęczmień palony	0.3 kg (4.6%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	40 min	10 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safbrew T-58	Ale	Slant	300 ml	Fermentis