

Smoked Rye Stout

- Gravity **10.1 BLG**
- ABV ---
- IBU **46**
- SRM **40**
- Style **Dry 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 **15 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **14 liter(s)**
- Total mash volume **17.5 liter(s)**

Steps

- Temp **40 C**, Time **10 min**
- Temp **64 C**, Time **50 min**
- Temp **75 C**, Time **10 min**

Mash step by step

- Heat up **14 liter(s)** of strike water to **42.5C**
- Add grains
- Keep mash **10 min** at **40C**
- Keep mash **50 min** at **64C**
- Keep mash **10 min** at **75C**
- Sparge using **15.9 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Ale	2.5 kg (71.4%)	80 %	5
Grain	Żytni wędzony Stainbach	0.5 kg (14.3%)	80 %	10
Grain	Extra black	0.5 kg (14.3%)	65 %	1400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	15 g	60 min	12 %
Boil	lunga	15 g	60 min	11 %

Yeasts

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

Extras

Type	Name	Amount	Use for	Time
Water Agent	Gips piwowarski	10 g	Mash	---