

wędzony stout

- Gravity **15.4 BLG**
- ABV **6.5 %**
- IBU **36**
- SRM **32.3**
- Style **Foreign Extra Stout**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **82 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.6 liter(s)**
- Total mash volume **24.8 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **15 min**
- Temp **76 C**, Time **10 min**

Mash step by step

- Heat up **18.6 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pilzneński	4 kg (64.5%)	81 %	4
Grain	Viking Malt Wędzony wiśnią	1 kg (16.1%)	82 %	10
Grain	Caraaroma	0.3 kg (4.8%)	78 %	400
Grain	Extra black	0.3 kg (4.8%)	65 %	1400
Grain	Weyermann - Carafa I	0.2 kg (3.2%)	70 %	690
Grain	Płatki pszeniczne	0.4 kg (6.5%)	85 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	20 g	60 min	10 %
Boil	Iunga	20 g	30 min	10 %
Boil	Sybilla	20 g	15 min	4.5 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Slant	120 ml	Safale