

Stout

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **11**
- SRM **22.7**
- 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 **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.3 liter(s)**
- Total mash volume **16.4 liter(s)**

Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **15 min**

Mash step by step

- Heat up **12.3 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **15 min** at **76C**
- Sparge using **18.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3.2 kg (78%)	85 %	7
Grain	Płatki owsiane	0.5 kg (12.2%)	85 %	3
Grain	Jęczmień palony	0.3 kg (7.3%)	55 %	985
Grain	Carafa II	0.1 kg (2.4%)	70 %	812

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	English Golding	15 g	50 min	4.8 %
Aroma (end of boil)	English Golding	15 g	10 min	4.8 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11.5 g	Safale