

Stout

- Gravity **9.8 BLG**
- ABV **3.8 %**
- IBU **51**
- SRM **25.7**
- 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 **70 min**
- Evaporation rate **10 %/h**
- Boil size **25.7 liter(s)**

Mash information

- Mash efficiency **60 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **13 liter(s)**
- Total mash volume **18.2 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **71 C**, Time **10 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **13 liter(s)** of strike water to **75.2C**
- Add grains
- Keep mash **60 min** at **66C**
- Keep mash **10 min** at **71C**
- Keep mash **10 min** at **78C**
- Sparge using **17.9 liter(s)** of **76C** water or to achieve **25.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Briess - Pale Ale Malt	3.9 kg (75%)	75 %	7
Grain	Monachijski	0.8 kg (15.4%)	75 %	16
Grain	Weyermann - Carafa I	0.25 kg (4.8%)	62 %	690
Grain	Barwiący	0.25 kg (4.8%)	55 %	985

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Mosaic	30 g	60 min	11.2 %
Boil	Mosaic	20 g	10 min	11 %

Yeasts

Name	Type	Form	Amount	Laboratory
Us	Ale	Dry	10 g	---