

stout I

- Gravity **20 BLG**
- ABV **8.8 %**
- IBU **21**
- SRM **30.3**
- 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 **80 min**
- Evaporation rate **10 %/h**
- Boil size **26.1 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **25.5 liter(s)**
- Total mash volume **34 liter(s)**

Steps

- Temp **65 C**, Time **80 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **25.5 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Keep mash **10 min** at **78C**
- Sparge using **9.1 liter(s)** of **76C** water or to achieve **26.1 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	3 kg (35.3%)	82 %	4
Grain	Strzegom Monachijski typ I	1 kg (11.8%)	79 %	16
Grain	Jęczmień palony	0.3 kg (3.5%)	55 %	985
Grain	Strzegom Czekoladowy ciemny	0.2 kg (2.4%)	68 %	1200
Grain	Viking Pale Ale malt	3 kg (35.3%)	80 %	5
Grain	Płatki owsiane	1 kg (11.8%)	60 %	3

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	25 g	60 min	10 %

Yeasts

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