

dry stout

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **33**
- SRM **37.8**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **13 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **16.4 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **8.9 liter(s)**
- Total mash volume **11.9 liter(s)**

Steps

- Temp **65 C**, Time **80 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **8.9 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **80 min** at **65C**
- Keep mash **10 min** at **77C**
- Sparge using **10.5 liter(s)** of **76C** water or to achieve **16.4 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.975 kg (66.4%)	80 %	5
Grain	Strzegom Monachijski typ II	0.5 kg (16.8%)	79 %	22
Grain	Jęczmień palony	0.2 kg (6.7%)	55 %	985
Grain	Weyermann - Dehusked Carafa III	0.3 kg (10.1%)	70 %	1024

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Magnum	10 g	60 min	13.5 %
Aroma (end of boil)	East Kent Goldings	20 g	15 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Slant	150 ml	Fermentis