

Dry Stout 13.5 blg a la Guinness

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **26**
- SRM **33.8**
- Style **Foreign Extra 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 **25.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.3 liter(s)**
- Total mash volume **20.4 liter(s)**

Steps

- Temp **64 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **77 C**, Time **10 min**

Mash step by step

- Heat up **15.3 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **45 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **10 min** at **77C**
- Sparge using **15.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pilsner malt	2.2 kg (39.3%)	82 %	4
Grain	Viking Pale Ale malt	2.2 kg (39.3%)	80 %	5
Grain	Special B Castle	0.3 kg (5.4%)	70 %	350
Grain	Simpsons - Roasted Barley	0.2 kg (3.6%)	70 %	1600
Adjunct	Platki owsiane	0.5 kg (8.9%)	85 %	3
Grain	Simpsons - Chocolate Malt	0.2 kg (3.6%)	73 %	1200

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus US	15 g	60 min	15.5 %
Aroma (end of boil)	East Kent Goldings	10 g	10 min	5.1 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale S-04	Ale	Dry	11 g	FERMENTIS