

Guinness clone

- Gravity **10.2 BLG**
- ABV **4.1 %**
- IBU **45**
- SRM **27.5**
- Style **Dry Stout**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **10 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.7 liter(s)**

Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12 liter(s)**
- Total mash volume **16 liter(s)**

Steps

- Temp **66 C**, Time **60 min**
- Temp **5 C**, Time **78 min**

Mash step by step

- Heat up **12 liter(s)** of strike water to **2.5C**
- Add grains
- Keep mash **78 min** at **5C**
- Keep mash **60 min** at **66C**
- Sparge using **19.7 liter(s)** of **76C** water or to achieve **27.7 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Simpsons - Maris Otter	2.5 kg (62.5%)	81 %	6
Grain	Jęczmień niestodowany	1 kg (25%)	75 %	2
Grain	Simpsons - Roasted Barley	0.5 kg (12.5%)	70 %	1084

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings	80 g	60 min	5.1 %