

# Guinness Clone

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **40**
- SRM **39.8**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **0 %**
- Size with trub loss **20 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **18.1 liter(s)**
- Total mash volume **22.7 liter(s)**

## Steps

- Temp **57 C**, Time **30 min**
- Temp **67 C**, Time **90 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **18.1 liter(s)** of strike water to **61.6C**
- Add grains
- Keep mash **30 min** at **57C**
- Keep mash **90 min** at **67C**
- Keep mash **15 min** at **76C**
- Sparge using **11.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Pale Malt, Maris Otter	3 kg (66.2%)	82.5 %	7
Grain	Barley, Flaked	1.03 kg (22.7%)	76.1 %	4
Grain	Roasted Barley	0.5 kg (11%)	74 %	1624

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	East Kent Goldings (EKG)	50 g	60 min	4.7 %
Boil	Marynka	10 g	60 min	10 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Irish Ale	Ale	Liquid	926.78 ml	Wyeast Labs