

# Guinness Clone

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **36**
- SRM **28**
- 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 **65 min**
- Evaporation rate **10 %/h**
- Boil size **25.5 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **17.5 liter(s)**
- Total mash volume **22.5 liter(s)**

## Steps

- Temp **65 C**, Time **45 min**
- Temp **72 C**, Time **30 min**
- Temp **79 C**, Time **1 min**

## Mash step by step

- Heat up **17.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **45 min** at **65C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **79C**
- Sparge using **13 liter(s)** of **76C** water or to achieve **25.5 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Weyermann - Pale Ale Malt	3 kg (60%)	85 %	7
Grain	Żytni	0.5 kg (10%)	85 %	8
Grain	Jęczmień palony	0.5 kg (10%)	55 %	985
Grain	Płatki żytnie	0.5 kg (10%)	60 %	3
Grain	płatki jęczmienne	0.5 kg (10%)	60 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	30 g	60 min	10 %
Boil	Lublin (Lubelski)	35 g	5 min	4 %

## Yeasts

Name	Type	Form	Amount	Laboratory
WLP518 - Opshaug Kveik Ale	Ale	Dry	4 g	White Labs

## Extras

Type	Name	Amount	Use for	Time
Fining	WHIRLFLOC	1 g	Boil	10 min