

# Guinness clone

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- Gravity **12.1 BLG**
- ABV **4.9 %**
- IBU **32**
- SRM **26.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **4 %**
- Size with trub loss **11.4 liter(s)**
- Boil time **90 min**
- Evaporation rate **8 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **7.9 liter(s)**
- Total mash volume **10.1 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **7.9 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **10 min** at **78C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

| Type  | Name              | Amount          | Yield | EBC |
|-------|-------------------|-----------------|-------|-----|
| Grain | Maris Otter Crisp | 1.5 kg (66.7%)  | 83 %  | 6   |
| Grain | Barley, Flaked    | 0.5 kg (22.2%)  | 70 %  | 4   |
| Grain | Jęczmień palony   | 0.25 kg (11.1%) | 55 %  | 985 |

## Hops

| Use for | Name               | Amount | Time   | Alpha acid |
|---------|--------------------|--------|--------|------------|
| Boil    | East Kent Goldings | 30 g   | 60 min | 5.1 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | ---        |