

# Guinness Clone Test

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- Gravity **10.5 BLG**
- ABV **4.2 %**
- IBU **30**
- SRM **45.4**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **30.4 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

## Steps

- Temp **55 C**, Time **1 min**
- Temp **68 C**, Time **60 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15.4 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **1 min** at **55C**
- Keep mash **60 min** at **68C**
- Keep mash **5 min** at **76C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **30.4 liter(s)** of wort

## Fermentables

| Type           | Name           | Amount        | Yield | EBC  |
|----------------|----------------|---------------|-------|------|
| Grain          | Pale Ale Best  | 3 kg (66.7%)  | 80 %  | 6    |
| Grain          | Oats, Flaked   | 1 kg (22.2%)  | 80 %  | 2    |
| Grain          | Chocolate Best | 0.2 kg (4.4%) | 75 %  | 900  |
| Grain          | Carafa II Best | 0.2 kg (4.4%) | 65 %  | 1100 |
| Liquid Extract | sinamar        | 0.1 kg (2.2%) | --- % | 8000 |

## Hops

| Use for             | Name               | Amount | Time   | Alpha acid |
|---------------------|--------------------|--------|--------|------------|
| Boil                | Perle              | 10 g   | 60 min | 9 %        |
| Boil                | East Kent Goldings | 50 g   | 15 min | 5.7 %      |
| Aroma (end of boil) | East Kent Goldings | 50 g   | 5 min  | 5.7 %      |

## Yeasts

| Name                          | Type | Form  | Amount | Laboratory  |
|-------------------------------|------|-------|--------|-------------|
| Wyeast - 1728<br>Scottish Ale | Ale  | Slant | 150 ml | Wyeast Labs |

## Extras

| Type   | Name      | Amount | Use for | Time   |
|--------|-----------|--------|---------|--------|
| Fining | WHIRLFLOC | 1.2 g  | Boil    | 10 min |

### Notes

- następnym razem barley roasted i carafa 0,3 kg  
przerwa 68°C - 60 min  
*Oct 27, 2020, 10:12 PM*