

# Guinness-Style Dry Stout

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **24**
- SRM **23.5**
- Style **Dry Stout**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.2 liter(s)**

## Steps

- Temp **49 C**, Time **15 min**
- Temp **66 C**, Time **60 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **12.6 liter(s)** of strike water to **53.1C**
- Add grains
- Keep mash **15 min** at **49C**
- Keep mash **60 min** at **66C**
- Keep mash **1 min** at **76C**
- Sparge using **17.4 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

## Fermentables

| Type    | Name              | Amount       | Yield | EBC |
|---------|-------------------|--------------|-------|-----|
| Grain   | Maris Otter Crisp | 3.6 kg (72%) | 83 %  | 6   |
| Adjunct | płatki jęczmienne | 1 kg (20%)   | 60 %  | 4   |
| Adjunct | Jęczmień palony   | 0.4 kg (8%)  | 55 %  | 985 |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Fuggles   | 50 g   | 60 min | 4.5 %      |
| Boil    | Whirflock | 0.5 g  | 15 min | 1 %        |

## Yeasts

| Name                                     | Type | Form | Amount | Laboratory      |
|------------------------------------------|------|------|--------|-----------------|
| Mangrove Jack's M42 New World Strong Ale | Ale  | Dry  | 11.5 g | Mangrove Jack's |