

# English ale porter

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **31**
- SRM **32**
- Style **English IPA**

## Batch size

- Expected quantity of finished beer **72 liter(s)**
- Trub loss **2 %**
- Size with trub loss **74.2 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **86.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **60 liter(s)**
- Total mash volume **80 liter(s)**

## Steps

- Temp **62 C**, Time **60 min**
- Temp **72 C**, Time **10 min**

## Mash step by step

- Heat up **60 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **60 min** at **62C**
- Keep mash **10 min** at **72C**
- Sparge using **46.1 liter(s)** of **76C** water or to achieve **86.1 liter(s)** of wort

## Fermentables

| Type  | Name                                              | Amount      | Yield | EBC |
|-------|---------------------------------------------------|-------------|-------|-----|
| Grain | Słód jęczmienne pilzneński czeski 3,5 EBC Bruntal | 15 kg (75%) | 80 %  | 4   |
| Grain | Caraaroma                                         | 1 kg (5%)   | 78 %  | 400 |
| Grain | Weyermann - Carafa I                              | 2 kg (10%)  | 70 %  | 800 |
| Grain | Jęczmień niestodowany                             | 2 kg (10%)  | 75 %  | 2   |

## Hops

| Use for             | Name              | Amount | Time   | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Aroma (end of boil) | Enigma (AUS)      | 270 g  | 1 min  | 17.2 %     |
| Boil                | Lublin (Lubelski) | 60 g   | 80 min | 4 %        |
| Boil                | Marynka           | 60 g   | 60 min | 10 %       |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 46 g   | Safale     |