

#15 Best Bitter

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **41**
- SRM **10**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **12 liter(s)**
- Trub loss **2 %**
- Size with trub loss **14 liter(s)**
- Boil time **60 min**
- Evaporation rate **18.5 %/h**
- Boil size **19.4 liter(s)**

Mash information

- Mash efficiency **72 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.7 liter(s)**

Steps

- Temp **63 C**, Time **60 min**

Mash step by step

- Heat up **12.1 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **63C**
- Sparge using **11 liter(s)** of **76C** water or to achieve **19.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|-----------------|-------|------|
| Grain | Maris Otter Crisp | 3.2 kg (87.6%) | 83 % | 6 |
| Grain | Biscuit Malt | 0.18 kg (4.9%) | 79 % | 45 |
| Grain | Caramel/Crystal Malt - 30L | 0.11 kg (3%) | 75 % | 59 |
| Grain | Caramel/Crystal Malt - 80L | 0.15 kg (4.1%) | 74 % | 200 |
| Grain | Strzegom pszenica prażona | 0.015 kg (0.4%) | 1 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------|--------|--------|------------|
| Boil | Challenger | 42 g | 60 min | 6.1 % |
| Whirlpool | East Kent Goldings | 50 g | 1 min | 5.1 % |
| Whirlpool | Cascade | 16 g | 1 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------------------------------|------|--------|--------|-------------|
| Wyeast - 1318 London Ale III | Ale | Liquid | 900 ml | Wyeast Labs |