

#44 Best Bitter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **63**
- SRM **9.3**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **2 %**
- Size with trub loss **23 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.4 liter(s)**

Mash information

- Mash efficiency **95 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **12.9 liter(s)**
- Total mash volume **16.6 liter(s)**

Steps

- Temp **63 C**, Time **30 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **12.9 liter(s)** of strike water to **69.1C**
- Add grains
- Keep mash **30 min** at **63C**
- Keep mash **20 min** at **72C**
- Sparge using **17.2 liter(s)** of **76C** water or to achieve **26.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------------|-----------------|-------|------|
| Grain | Maris Otter Crisp | 3.27 kg (88.8%) | 83 % | 7 |
| Grain | Caramel/Crystal Malt - 60L | 0.22 kg (6%) | 74 % | 170 |
| Grain | Amber Malt | 0.17 kg (4.6%) | 75 % | 70 |
| Grain | Weyermann - Dehusked Carafo III | 0.023 kg (0.6%) | 1 % | 1400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|--------------------|--------|----------|------------|
| Boil | lunga | 43 g | 60 min | 11.5 % |
| Boil | East Kent Goldings | 25 g | 10 min | 4.5 % |
| Boil | Fuggles | 20 g | 10 min | 4.2 % |
| Whirlpool | East Kent Goldings | 25 g | 1 min | 4.5 % |
| Whirlpool | Fuggles | 15 g | 1 min | 4.2 % |
| Dry Hop | East Kent Goldings | 30 g | 2 day(s) | 5.1 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|--------|------------|
| WLP002 - English Ale Yeast | Ale | Liquid | 120 ml | White Labs |