

## Best Bitter

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **44**
- SRM **6.3**
- Style **Special/Best/Premium Bitter**

### Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

### Mash information

- Mash efficiency **90 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **12.6 liter(s)**
- Total mash volume **16.8 liter(s)**

### Steps

- Temp **67 C**, Time **60 min**
- Temp **76 C**, Time **0 min**

### Mash step by step

- Heat up **12.6 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **60 min** at **67C**
- Keep mash **0 min** at **76C**
- Sparge using **19.4 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

### Fermentables

| Type  | Name                | Amount         | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Castle Pale Ale     | 3.5 kg (83.3%) | 80 %  | 8   |
| Grain | Pilzneński          | 0.5 kg (11.9%) | 81 %  | 4   |
| Grain | Strzegom Karmel 150 | 0.2 kg (4.8%)  | 75 %  | 150 |

### Hops

| Use for             | Name            | Amount | Time   | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil                | Hallertau Blanc | 15 g   | 60 min | 11 %       |
| Boil                | Hallertau Blanc | 15 g   | 25 min | 11 %       |
| Boil                | Simcoe          | 15 g   | 25 min | 13.3 %     |
| Aroma (end of boil) | Hallertau Blanc | 30 g   | 0 min  | 11 %       |
| Aroma (end of boil) | Simcoe          | 15 g   | 0 min  | 13.3 %     |

### Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11.5 g | Safale     |