

# Bitter Bocheński

- Gravity **13.3 BLG**
- ABV ---
- IBU **44**
- SRM **12.2**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **32.2 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **2.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **21.5 liter(s)**

## Steps

- Temp **67 C**, Time **90 min**

## Mash step by step

- Heat up **15.4 liter(s)** of strike water to **76.4C**
- Add grains
- Keep mash **90 min** at **67C**
- Sparge using **23 liter(s)** of **76C** water or to achieve **32.2 liter(s)** of wort

## Fermentables

| Type  | Name                 | Amount         | Yield | EBC |
|-------|----------------------|----------------|-------|-----|
| Grain | Viking Pale Ale malt | 5 kg (81.3%)   | 80 %  | 5   |
| Grain | Pszeniczny           | 0.5 kg (8.1%)  | 85 %  | 4   |
| Grain | Carared              | 0.5 kg (8.1%)  | 75 %  | 39  |
| Grain | Jęczmień palony      | 0.05 kg (0.8%) | 55 %  | 985 |
| Grain | Strzegom Karmel 150  | 0.1 kg (1.6%)  | 75 %  | 150 |

## Hops

| Use for             | Name    | Amount | Time   | Alpha acid |
|---------------------|---------|--------|--------|------------|
| Boil                | Magnat  | 35 g   | 60 min | 11.2 %     |
| Boil                | Fuggles | 25 g   | 15 min | 4.5 %      |
| Boil                | Marynka | 5 g    | 15 min | 9.4 %      |
| Aroma (end of boil) | Fuggles | 25 g   | 0 min  | 4.5 %      |
| Aroma (end of boil) | Marynka | 5 g    | 0 min  | 9.4 %      |

## Yeasts

| Name        | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale  | Dry  | 11 g   | Safale     |