

# Bitter

- Gravity **11 BLG**
- ABV ---
- IBU **28**
- SRM **7.5**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **10 liter(s)**
- Trub loss **10 %**
- Size with trub loss **11 liter(s)**
- Boil time **60 min**
- Evaporation rate **15 %/h**
- Boil size **13.8 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **6 liter(s)**
- Total mash volume **8 liter(s)**

## Steps

- Temp **62 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **76 C**, Time **1 min**

## Mash step by step

- Heat up **6 liter(s)** of strike water to **69C**
- Add grains
- Keep mash **30 min** at **62C**
- Keep mash **30 min** at **72C**
- Keep mash **1 min** at **76C**
- Sparge using **9.8 liter(s)** of **76C** water or to achieve **13.8 liter(s)** of wort

## Fermentables

| Type  | Name                      | Amount     | Yield | EBC |
|-------|---------------------------|------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 1 kg (50%) | 85 %  | 7   |
| Grain | Monachijski               | 1 kg (50%) | 80 %  | 16  |

## Hops

| Use for             | Name            | Amount | Time   | Alpha acid |
|---------------------|-----------------|--------|--------|------------|
| Boil                | English Golding | 20 g   | 60 min | 4.8 %      |
| Aroma (end of boil) | English Golding | 10 g   | 10 min | 4.8 %      |

## Yeasts

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