

# Bitter

- Gravity **10 BLG**
- ABV **4 %**
- IBU **30**
- SRM **8.4**
- Style **Standard/Ordinary Bitter**

## Batch size

- Expected quantity of finished beer **25 liter(s)**
- Trub loss **5 %**
- Size with trub loss **26.3 liter(s)**
- Boil time **75 min**
- Evaporation rate **10 %/h**
- Boil size **32.4 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **15.4 liter(s)**
- Total mash volume **19.8 liter(s)**

## Steps

- Temp **55 C**, Time **3 min**
- Temp **60 C**, Time **66 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **15.4 liter(s)** of strike water to **60C**
- Add grains
- Keep mash **3 min** at **55C**
- Keep mash **66 min** at **60C**
- Keep mash **5 min** at **76C**
- Sparge using **21.4 liter(s)** of **76C** water or to achieve **32.4 liter(s)** of wort

## Fermentables

| Type  | Name                              | Amount         | Yield | EBC |
|-------|-----------------------------------|----------------|-------|-----|
| Grain | Strzegom Monachijski typ I        | 2 kg (45.5%)   | 79 %  | 16  |
| Grain | Strzegom Wiedeński                | 1 kg (22.7%)   | 79 %  | 10  |
| Grain | Weyermann - Bohemian Pilsner Malt | 1 kg (22.7%)   | 81 %  | 4   |
| Grain | Strzegom Czekoladowy jasny        | 0.15 kg (3.4%) | 68 %  | 400 |
| Grain | Weyermann - Carapils              | 0.25 kg (5.7%) | 78 %  | 4   |

## Hops

| Use for | Name    | Amount | Time   | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil    | Admiral | 18 g   | 60 min | 15.1 %     |
| Boil    | Fuggles | 50 g   | 5 min  | 4.2 %      |

## Yeasts

| Name         | Type | Form | Amount | Laboratory |
|--------------|------|------|--------|------------|
| Safale US-05 | Ale  | Dry  | 11 g   | Fermentis  |