

# Bock

- Gravity **17.7 BLG**
- ABV ---
- IBU **25**
- SRM **21.6**
- Style **Traditional Bock**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **19.8 liter(s)**
- Total mash volume **26.4 liter(s)**

## Steps

- Temp **55 C**, Time **20 min**
- Temp **64 C**, Time **30 min**
- Temp **72 C**, Time **30 min**
- Temp **78 C**, Time **0 min**

## Mash step by step

- Heat up **19.8 liter(s)** of strike water to **60.8C**
- Add grains
- Keep mash **20 min** at **55C**
- Keep mash **30 min** at **64C**
- Keep mash **30 min** at **72C**
- Keep mash **0 min** at **78C**
- Sparge using **12.1 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

| Type  | Name                        | Amount         | Yield | EBC |
|-------|-----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński         | 1.5 kg (22.7%) | 80 %  | 4   |
| Grain | Viking Pale Ale malt        | 1 kg (15.2%)   | 80 %  | 5   |
| Grain | Monachijski                 | 3 kg (45.5%)   | 80 %  | 16  |
| Grain | Special B Castle            | 0.3 kg (4.5%)  | 70 %  | 350 |
| Grain | Weyermann - Melanoiden Malt | 0.4 kg (6.1%)  | 81 %  | 53  |
| Grain | Biscuit Malt                | 0.4 kg (6.1%)  | 79 %  | 45  |

## Hops

| Use for | Name      | Amount | Time   | Alpha acid |
|---------|-----------|--------|--------|------------|
| Boil    | Marynka   | 20 g   | 60 min | 10.5 %     |
| Boil    | Hallertau | 40 g   | 5 min  | 5.4 %      |

## Yeasts

| Name             | Type  | Form  | Amount | Laboratory  |
|------------------|-------|-------|--------|-------------|
| Wyeast - Urquell | Lager | Slant | 200 ml | Wyeast Labs |