

## Bock beta-0.1

- Gravity **17.5 BLG**
- ABV ---
- IBU **28**
- SRM **10.4**
- Style **Doppelbock**

### Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **10 %**
- Size with trub loss **22 liter(s)**
- Boil time **90 min**
- Evaporation rate **15 %/h**
- Boil size **26.9 liter(s)**

### Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **22.4 liter(s)**
- Total mash volume **28.8 liter(s)**

### Steps

- Temp **50 C**, Time **20 min**
- Temp **64 C**, Time **20 min**
- Temp **73 C**, Time **40 min**
- Temp **78 C**, Time **0 min**

### Mash step by step

- Heat up **22.4 liter(s)** of strike water to **54.3C**
- Add grains
- Keep mash **20 min** at **50C**
- Keep mash **20 min** at **64C**
- Keep mash **40 min** at **73C**
- Keep mash **0 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

### Fermentables

| Type  | Name                       | Amount         | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński        | 3.5 kg (54.7%) | 80 %  | 4   |
| Grain | Strzegom Monachijski typ I | 2.6 kg (40.6%) | 79 %  | 16  |
| Grain | Karmelowy Czerwony         | 0.3 kg (4.7%)  | 75 %  | 59  |

### Hops

| Use for | Name       | Amount | Time   | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil    | Tettnanger | 85 g   | 90 min | 3 %        |
| Boil    | Tettnanger | 15 g   | 10 min | 3 %        |

### Yeasts

| Name          | Type  | Form | Amount | Laboratory                         |
|---------------|-------|------|--------|------------------------------------|
| Saflager S-23 | Lager | Dry  | 23 g   | Fermentis Division of S.I.Lesaffre |

### Extras

| Type | Name | Amount | Use for | Time |
|------|------|--------|---------|------|
|------|------|--------|---------|------|

|        |                |     |      |        |
|--------|----------------|-----|------|--------|
| Fining | Mech irlandzki | 3 g | Boil | 10 min |
|--------|----------------|-----|------|--------|