

Bock beta-0.3

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **23**
- SRM **14.1**
- 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 **29.4 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **22.1 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 **22.1 liter(s)** of strike water to **54.5C**
- 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 **14 liter(s)** of **76C** water or to achieve **29.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 3.5 kg (52.2%) | 80 % | 4 |
| Grain | Strzegom Monachijski typ I | 2.6 kg (38.8%) | 79 % | 16 |
| Grain | Karmelowy Czerwony | 0.3 kg (4.5%) | 75 % | 59 |
| Grain | Caraaroma | 0.3 kg (4.5%) | 78 % | 400 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|-----------------------|--------|--------|------------|
| Boil | Saaz (Czech Republic) | 40 g | 90 min | 4.5 % |
| Boil | Oktawia | 20 g | 10 min | 7.1 % |
| Boil | Saaz (Czech Republic) | 10 g | 10 min | 4.5 % |

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 |