

#25

- Gravity **13.3 BLG**
- ABV **5.5 %**
- IBU **32**
- SRM **6.7**
- Style **Traditional Bock**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **27.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **13.5 liter(s)**
- Total mash volume **18 liter(s)**

Steps

- Temp **47 C**, Time **15 min**
- Temp **62 C**, Time **20 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **13.5 liter(s)** of strike water to **51.5C**
- Add grains
- Keep mash **15 min** at **47C**
- Keep mash **20 min** at **62C**
- Keep mash **20 min** at **72C**
- Sparge using **18.8 liter(s)** of **76C** water or to achieve **27.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------------|------------------------------------|---------------|-------|-----|
| Grain | Strzegom Wiedeński | 2 kg (36.4%) | 79 % | 10 |
| Grain | Grodziski pszeniczny wędzony dębem | 0.5 kg (9.1%) | 80 % | 3 |
| Dry Extract | WES ekstrakt słodowy jasny | 1 kg (18.2%) | 80 % | --- |
| Grain | Strzegom Monachijski typ II | 2 kg (36.4%) | 79 % | 22 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-----------|--------|--------|------------|
| Boil | Herkules | 15 g | 60 min | 20 % |
| Aroma (end of boil) | Tradition | 15 g | 10 min | 6 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|------|--------|------------|
| us-33 | Ale | Dry | 11.5 g | --- |