

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 |