

Bitter-sweet memories

- Gravity **11.7 BLG**
- ABV **4.7 %**
- IBU **38**
- SRM **5.1**
- Style **Extra Special/Strong Bitter (English Pale Ale)**

Batch size

- Expected quantity of finished beer **23 liter(s)**
- Trub loss **5 %**
- Size with trub loss **24.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **29 liter(s)**

Mash information

- Mash efficiency **65 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18.8 liter(s)**
- Total mash volume **25 liter(s)**

Steps

- Temp **65 C**, Time **60 min**

Mash step by step

- Heat up **18.8 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Sparge using **16.5 liter(s)** of **76C** water or to achieve **29 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Strzegom Pale Ale | 5 kg (80%) | 79 % | 6 |
| Grain | Strzegom Golden Ale | 1 kg (16%) | 80 % | 10 |
| Grain | Cara-Pils/Dextrine | 0.25 kg (4%) | 72 % | 4 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Hallertau | 30 g | 50 min | 11.7 % |
| Boil | Challenger | 10 g | 30 min | 7 % |
| Boil | Challenger | 40 g | 0 min | 7 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| English Ale | Ale | Dry | 10 g | Bulldog |