

#40 Bitter

- Gravity **8.5 BLG**
- ABV ---
- IBU **46**
- SRM **6.8**
- Style **Special/Best/Premium Bitter**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.8 liter(s)**
- Boil time **90 min**
- Evaporation rate **10 %/h**
- Boil size **29.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.8 liter(s)**
- Total mash volume **14.4 liter(s)**

Steps

- Temp **72 C**, Time **90 min**

Mash step by step

- Heat up **10.8 liter(s)** of strike water to **80.7C**
- Add grains
- Keep mash **90 min** at **72C**
- Sparge using **22.7 liter(s)** of **76C** water or to achieve **29.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------|----------------|--------|-----|
| Grain | Strzegom Pale Ale | 3.2 kg (88.9%) | 79 % | 6 |
| Grain | Crystal 150 | 0.3 kg (8.3%) | 74 % | 150 |
| Grain | Acid Malt | 0.1 kg (2.8%) | 58.7 % | 6 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|--------|------------|
| Boil | Challenger | 45 g | 60 min | 7 % |
| Boil | Fuggles | 25 g | 15 min | 4.5 % |
| Boil | Fuggles | 20 g | 0 min | 4.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|----------------------------|------|--------|--------|------------------|
| FM10 O czym szumią wierzby | Ale | Liquid | 800 ml | Fermentum Mobile |