

moj torf

- Gravity **16.8 BLG**
- ABV **7.1 %**
- IBU **75**
- SRM **69.2**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **14 liter(s)**
- Trub loss **5 %**
- Size with trub loss **14.7 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **17.2 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **15.9 liter(s)**
- Total mash volume **21.2 liter(s)**

Steps

- Temp **64 C**, Time **90 min**
- Temp **76 C**, Time **5 min**

Mash step by step

- Heat up **15.9 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **90 min** at **64C**
- Keep mash **5 min** at **76C**
- Sparge using **6.6 liter(s)** of **76C** water or to achieve **17.2 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|----------------|-------|------|
| Grain | Barley, Torrefied | 4 kg (75.5%) | 79 % | 10 |
| Grain | Carafa typ 1 | 0.45 kg (8.5%) | 70 % | 900 |
| Grain | Strzegom Czekoladowy ciemny | 0.4 kg (7.5%) | 68 % | 1200 |
| Grain | Strzegom pszenica prażona | 0.45 kg (8.5%) | 70 % | 1000 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|---------|--------|--------|------------|
| Boil | lunga | 30 g | 60 min | 11 % |
| Boil | Marynka | 30 g | 30 min | 10 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
| Us05 | Ale | Dry | 11.5 g | --- |