

A Porter

- Gravity **14.7 BLG**
- ABV **6.1 %**
- IBU **43**
- SRM **30.9**
- Style **Brown Porter**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **14 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.1 liter(s)**
- Total mash volume **13.4 liter(s)**

Steps

- Temp **64 C**, Time **60 min**

Mash step by step

- Heat up **10.1 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **60 min** at **64C**
- Sparge using **7.3 liter(s)** of **76C** water or to achieve **14 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-------------------------------|----------------|--------|------|
| Grain | Strzegom Pale Ale | 2.5 kg (74.6%) | 79 % | 6 |
| Grain | Fawcett - Brown | 0.25 kg (7.5%) | 72 % | 180 |
| Grain | Castle Cafe | 0.25 kg (7.5%) | 75.5 % | 480 |
| Grain | Karmelowy Pszeniczny Strzegom | 0.25 kg (7.5%) | 79 % | 130 |
| Grain | Strzegom Czekoladowy ciemny | 0.1 kg (3%) | 68 % | 1200 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------|--------|--------|------------|
| Boil | Centennial | 15 g | 60 min | 10.5 % |
| Aroma (end of boil) | Centennial | 15 g | 15 min | 10.5 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|-------|--------|------------|
| FM10 | Ale | Slant | 500 ml | FM |