

bartoszkowy browarek

- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **43**
- SRM **5.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.8 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **18.2 liter(s)**
- Total mash volume **23.4 liter(s)**

Steps

- Temp **62 C**, Time **50 min**
- Temp **72 C**, Time **15 min**
- Temp **77 C**, Time **5 min**

Mash step by step

- Heat up **18.2 liter(s)** of strike water to **68C**
- Add grains
- Keep mash **50 min** at **62C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **77C**
- Sparge using **13.8 liter(s)** of **76C** water or to achieve **26.8 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|-----------------------------|---------------|-------|-----|
| Grain | Pilzneński | 4 kg (76.9%) | 81 % | 4 |
| Grain | Strzegom Monachijski typ II | 1 kg (19.2%) | 79 % | 22 |
| Grain | Płatki pszeniczne | 0.2 kg (3.8%) | 85 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------|--------|----------|------------|
| Boil | Simcoe | 10 g | 50 min | 13.5 % |
| Boil | Simcoe | 20 g | 20 min | 13.5 % |
| Boil | Mosaic | 20 g | 10 min | 11 % |
| Boil | Mosaic | 10 g | 5 min | 11 % |
| Boil | Centennial | 30 g | 1 min | 11.3 % |
| Dry Hop | Centennial | 30 g | 4 day(s) | 11.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------------|------|------|--------|------------|
| Safale S-04 | Ale | Dry | 11.5 g | --- |