

Apa konkursowa

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **31**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **17.3 liter(s)**

Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.1 liter(s)**

Steps

- Temp **68 C**, Time **70 min**
- Temp **72 C**, Time **20 min**

Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|----------------|-------|-----|
| Grain | Strzegom Pilzneński | 2.5 kg (82.8%) | 80 % | 4 |
| Grain | Płatki owsiane | 0.4 kg (13.2%) | 60 % | 3 |
| Grain | Abbey Castle | 0.12 kg (4%) | 80 % | 45 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------|------------------------|--------|--------|------------|
| Boil | Columbus/Tomahawk/Zeus | 15 g | 30 min | 13.9 % |