

APA no name

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **36**
- SRM **15.1**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **5 %**
- Size with trub loss **23.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **28.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.3 liter(s) / kg**
- Mash size **18.5 liter(s)**
- Total mash volume **24.1 liter(s)**

Steps

- Temp **68 C**, Time **90 min**

Mash step by step

- Heat up **18.5 liter(s)** of strike water to **75.3C**
- Add grains
- Keep mash **90 min** at **68C**
- Sparge using **15.4 liter(s)** of **76C** water or to achieve **28.3 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------------|----------------|-------|-----|
| Grain | Simpsons - Golden Promise | 2 kg (35.7%) | 81 % | 4 |
| Grain | Strzegom Wiedeński | 1 kg (17.9%) | 79 % | 10 |
| Grain | Żytni | 0.5 kg (8.9%) | 85 % | 6 |
| Grain | Viking Wheat Malt | 0.7 kg (12.5%) | 83 % | 5 |
| Grain | Fawcett Crystal Rye | 1 kg (17.9%) | 72 % | 200 |
| Grain | Fawcett pale caramalt | 0.1 kg (1.8%) | 72 % | 15 |
| Grain | Płatki owsiane | 0.3 kg (5.4%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|--------|--------|----------|------------|
| Boil | Magnat | 5 g | 60 min | 13.6 % |
| Boil | Sabro | 5 g | 60 min | 15 % |
| Aroma (end of boil) | Sabro | 10 g | 15 min | 15 % |
| Aroma (end of boil) | Strata | 10 g | 15 min | 15.3 % |
| Dry Hop | Sabro | 15 g | 5 day(s) | 15 % |
| Aroma (end of boil) | Strata | 10 g | 2 min | 15.3 % |
| Whirlpool | Strata | 15 g | 15 min | 15.3 % |
| Dry Hop | Strata | 15 g | 5 day(s) | 15.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|---------------|------|-------|--------|------------|
| No name lager | Ale | Slant | 100 ml | --- |