

APA MIX

- Gravity **11.9 BLG**
- ABV **4.8 %**
- IBU **40**
- SRM **5.3**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **26.9 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.2 liter(s) / kg**
- Mash size **15.8 liter(s)**
- Total mash volume **20.8 liter(s)**

Steps

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

Mash step by step

- Heat up **15.8 liter(s)** of strike water to **75.5C**
- Add grains
- Keep mash **70 min** at **68C**
- Sparge using **16.1 liter(s)** of **76C** water or to achieve **26.9 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------------|----------------|-------|-----|
| Grain | Weyermann - Pale Ale Malt | 1.5 kg (30.3%) | 85 % | 7 |
| Grain | Strzegom Monachijski typ I | 1 kg (20.2%) | 79 % | 14 |
| Grain | Żytni | 1 kg (20.2%) | 85 % | 6 |
| Grain | Strzegom Wiedeński | 1 kg (20.2%) | 79 % | 10 |
| Grain | Jęczmień niesłodowany | 0.2 kg (4%) | 75 % | 2 |
| Grain | Słód owsiany Fawcett | 0.25 kg (5.1%) | 61 % | 5 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|------------------|--------|----------|------------|
| Boil | Warrior | 15 g | 30 min | 15.5 % |
| Aroma (end of boil) | Falconers flight | 15 g | 10 min | 10.3 % |
| Aroma (end of boil) | Mosaic | 15 g | 10 min | 12.2 % |
| Aroma (end of boil) | Falconers flight | 10 g | 2 min | 10.3 % |
| Aroma (end of boil) | Mosaic | 10 g | 2 min | 12.2 % |
| Whirlpool | Falconers flight | 10 g | 15 min | 10.3 % |
| Whirlpool | Mosaic | 10 g | 15 min | 12.2 % |
| Dry Hop | Falconers flight | 15 g | 5 day(s) | 10.3 % |

| | | | | |
|---------|--------|------|----------|--------|
| Dry Hop | Mosaic | 15 g | 5 day(s) | 12.2 % |
|---------|--------|------|----------|--------|

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| Us-05 | Ale | Slant | 150 ml | Safale |