

Taka zwykła APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **6.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **140 liter(s)**
- Trub loss **5 %**
- Size with trub loss **147 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **177.1 liter(s)**

Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **99 liter(s)**
- Total mash volume **132 liter(s)**

Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

Mash step by step

- Heat up **99 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **111.1 liter(s)** of **76C** water or to achieve **177.1 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|--------------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 20 kg (60.6%) | 80 % | 5 |
| Grain | Monachijski | 8 kg (24.2%) | 80 % | 16 |
| Grain | Karmelowy Jasny 30EBC | 5 kg (15.2%) | 75 % | 30 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|-------------------|--------|--------|------------|
| Boil | Marynka | 90 g | 60 min | 10 % |
| Boil | Lublin (Lubelski) | 90 g | 60 min | 4 % |
| Aroma (end of boil) | Magnat | 90 g | 2 min | 11.2 % |
| Aroma (end of boil) | Puławski | 120 g | 2 min | 4.3 % |

Yeasts

| Name | Type | Form | Amount | Laboratory |
|-------|------|-------|--------|------------|
| US-50 | Ale | Slant | 500 ml | Fermentis |