

apa 2022 niepodległości

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **21**
- SRM **3.6**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **66 liter(s)**
- Trub loss **5 %**
- Size with trub loss **73.3 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **83.4 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **48 liter(s)**
- Total mash volume **64 liter(s)**

Steps

- Temp **65 C**, Time **60 min**
- Temp **78 C**, Time **5 min**

Mash step by step

- Heat up **48 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **60 min** at **65C**
- Keep mash **5 min** at **78C**
- Sparge using **51.4 liter(s)** of **76C** water or to achieve **83.4 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|---------------------|--------------|-------|-----|
| Grain | Viking Pilsner malt | 12 kg (75%) | 82 % | 4 |
| Grain | Viking Wheat Malt | 3 kg (18.8%) | 83 % | 5 |
| Grain | Płatki owsiane | 1 kg (6.3%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|---------------------|---------------|--------|--------|------------|
| Aroma (end of boil) | Nelson Sauvín | 100 g | 5 min | 11 % |
| Whirlpool | Nelson Sauvín | 100 g | 30 min | 11 % |