

A I P A Wolności

- Gravity **14.3 BLG**
- ABV **5.9 %**
- IBU **36**
- SRM **4.9**
- Style **American IPA**

Batch size

- Expected quantity of finished beer **60 liter(s)**
- Trub loss **3 %**
- Size with trub loss **63.6 liter(s)**
- Boil time **60 min**
- Evaporation rate **7 %/h**
- Boil size **72.5 liter(s)**

Mash information

- Mash efficiency **77 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **49.5 liter(s)**
- Total mash volume **66 liter(s)**

Steps

- Temp **77 C**, Time **5 min**
- Temp **66 C**, Time **70 min**

Mash step by step

- Heat up **49.5 liter(s)** of strike water to **73.7C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **5 min** at **77C**
- Sparge using **39.5 liter(s)** of **76C** water or to achieve **72.5 liter(s)** of wort

Fermentables

| Type | Name | Amount | Yield | EBC |
|-------|----------------------|---------------|-------|-----|
| Grain | Viking Pale Ale malt | 12 kg (72.7%) | 80 % | 5 |
| Grain | Viking Wheat Malt | 2 kg (12.1%) | 83 % | 5 |
| Grain | Weyermann - Carared | 0.5 kg (3%) | 75 % | 45 |
| Grain | Płatki pszeniczne | 1 kg (6.1%) | 85 % | 3 |
| Grain | Płatki owsiane | 1 kg (6.1%) | 60 % | 3 |

Hops

| Use for | Name | Amount | Time | Alpha acid |
|-----------|-------------------|--------|--------|------------|
| Boil | lunga | 100 g | 1 min | 9.6 % |
| Whirlpool | Mandarina Bavaria | 200 g | 60 min | 10 % |