

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 %