

# 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 %