

# APA II Warka nr.11

- Gravity **13.1 BLG**
- ABV ---
- IBU **54**
- SRM **8.7**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **14.4 liter(s)**
- Total mash volume **19.2 liter(s)**

## Steps

- Temp **65 C**, Time **40 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **10 min**

## Mash step by step

- Heat up **14.4 liter(s)** of strike water to **72.5C**
- Add grains
- Keep mash **40 min** at **65C**
- Keep mash **20 min** at **72C**
- Keep mash **10 min** at **76C**
- Sparge using **15.7 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.5 kg (72.9%)	79 %	6
Grain	Strzegom Wiedeński	1 kg (20.8%)	79 %	10
Grain	Słód pszeniczny Bestmalz	0.15 kg (3.1%)	82 %	5
Grain	Słód Crystal Castlemalting	0.15 kg (3.1%)	78 %	150

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Azacca	25 g	30 min	14 %
Boil	Mosaic	15 g	20 min	10 %
Boil	Azacca	10 g	10 min	14 %
Boil	Mosaic	10 g	5 min	10 %
Boil	Azacca	10 g	5 min	14 %
Whirlpool	Azacca	25 g	0 min	14 %
Whirlpool	Mosaic	25 g	0 min	10 %
Dry Hop	Centennial	50 g	10 day(s)	10.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
FM52 Amerykański Sen	Ale	Liquid	15 ml	Fermentum Mobile