

# Taka zwykła APA

- Gravity **12.4 BLG**
- ABV **5 %**
- IBU **22**
- SRM **6.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **140 liter(s)**
- Trub loss **5 %**
- Size with trub loss **147 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **177.1 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **99 liter(s)**
- Total mash volume **132 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **78 C**, Time **15 min**

## Mash step by step

- Heat up **99 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **15 min** at **78C**
- Sparge using **111.1 liter(s)** of **76C** water or to achieve **177.1 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	20 kg (60.6%)	80 %	5
Grain	Monachijski	8 kg (24.2%)	80 %	16
Grain	Karmelowy Jasny 30EBC	5 kg (15.2%)	75 %	30

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	90 g	60 min	10 %
Boil	Lublin (Lubelski)	90 g	60 min	4 %
Aroma (end of boil)	Magnat	90 g	2 min	11.2 %
Aroma (end of boil)	Puławski	120 g	2 min	4.3 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US-50	Ale	Slant	500 ml	Fermentis