

# Pierwsza Warka - APA

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- Gravity **12.9 BLG**
- ABV **5.2 %**
- IBU **31**
- SRM **5.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **22 liter(s)**
- Trub loss **1 %**
- Size with trub loss **22.4 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.9 liter(s)**

## Mash information

- Mash efficiency **80 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **20 liter(s)**
- Total mash volume **25 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **72 C**, Time **15 min**
- Temp **78 C**, Time **5 min**

## Mash step by step

- Heat up **20 liter(s)** of strike water to **69.5C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **15 min** at **72C**
- Keep mash **5 min** at **78C**
- Sparge using **10.9 liter(s)** of **76C** water or to achieve **25.9 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	3.2 kg (64%)	79 %	6
Grain	Strzegom Karmel 150	0.1 kg (2%)	75 %	150
Grain	Strzegom Pszeniczny	0.9 kg (18%)	81 %	6
Grain	Oats, Flaked	0.8 kg (16%)	80 %	2

## Hops

Use for	Name	Amount	Time	Alpha acid
First Wort	Citra	5 g	60 min	12 %
First Wort	Amarillo	5 g	60 min	9.5 %
Boil	Citra	5 g	30 min	12 %
Boil	Amarillo	5 g	15 min	9.5 %
Aroma (end of boil)	Citra	20 g	5 min	12 %
Aroma (end of boil)	Amarillo	20 g	5 min	9.5 %
Aroma (end of boil)	Mosaic	10 g	5 min	10 %
Whirlpool	Mosaic	10 g	0 min	10 %
Whirlpool	Citra	10 g	0 min	12 %

Whirlpool	Amarillo	10 g	0 min	9.5 %
Dry Hop	Citra	60 g	3 day(s)	12 %
Dry Hop	Amarillo	60 g	3 day(s)	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis