

# Początek

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- Gravity **12.6 BLG**
- ABV **5.1 %**
- IBU **35**
- SRM **4.1**
- 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 **3.4 liter(s) / kg**
- Mash size **17 liter(s)**
- Total mash volume **22 liter(s)**

## Steps

- Temp **67 C**, Time **60 min**

## Mash step by step

- Heat up **17 liter(s)** of strike water to **73.9C**
- Add grains
- Keep mash **60 min** at **67C**
- Sparge using **13.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	5 kg (100%)	80 %	5

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Citra	15 g	60 min	12.9 %
Boil	Citra	8 g	25 min	12.9 %
Aroma (end of boil)	Citra	20 g	5 min	12.9 %
Dry Hop	Citra	30 g	7 day(s)	12.9 %

## Yeasts

Name	Type	Form	Amount	Laboratory
US 05	Ale	Dry	9 g	---