

# Apa konkursowa

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- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **31**
- SRM **4.4**
- Style **American Pale Ale**

## Batch size

- Expected quantity of finished beer **11 liter(s)**
- Trub loss **5 %**
- Size with trub loss **13.2 liter(s)**
- Boil time **60 min**
- Evaporation rate **25 %/h**
- Boil size **17.3 liter(s)**

## Mash information

- Mash efficiency **70 %**
- Liquor-to-grist ratio **4 liter(s) / kg**
- Mash size **12.1 liter(s)**
- Total mash volume **15.1 liter(s)**

## Steps

- Temp **68 C**, Time **70 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **12.1 liter(s)** of strike water to **74C**
- Add grains
- Keep mash **70 min** at **68C**
- Keep mash **20 min** at **72C**
- Sparge using **8.2 liter(s)** of **76C** water or to achieve **17.3 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	2.5 kg (82.8%)	80 %	4
Grain	Płatki owsiane	0.4 kg (13.2%)	60 %	3
Grain	Abbey Castle	0.12 kg (4%)	80 %	45

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	30 min	13.9 %