

# Apa z karmelowym

- Gravity **15 BLG**
- ABV **6.2 %**
- IBU **57**
- SRM **5.5**
- 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 **14.5 liter(s)**
- Total mash volume **19.4 liter(s)**

## Steps

- Temp **64 C**, Time **60 min**
- Temp **78 C**, Time **10 min**

## Mash step by step

- Heat up **14.5 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **60 min** at **64C**
- Keep mash **10 min** at **78C**
- 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	Viking Pale Ale malt	4 kg (70.8%)	80 %	5
Grain	Strzegom Karmel 30	0.6 kg (10.6%)	75 %	30
Adjunct	Płatki owsiane	0.8 kg (14.2%)	85 %	3
Grain	Pszeniczny	0.25 kg (4.4%)	85 %	4

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Simcoe	30 g	60 min	14.5 %
Boil	Citra	30 g	10 min	12 %
Boil	Citra	10 g	0 min	12 %
Boil	Simcoe	20 g	0 min	13.2 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Kveik	Ale	Slant	10 ml	---