

# APA

- Gravity **16.1 BLG**
- ABV **6.8 %**
- IBU **28**
- SRM **9.7**
- 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 **19.5 liter(s)**
- Total mash volume **26 liter(s)**

## Steps

- Temp **67 C**, Time **40 min**
- Temp **72 C**, Time **20 min**

## Mash step by step

- Heat up **19.5 liter(s)** of strike water to **74.8C**
- Add grains
- Keep mash **40 min** at **67C**
- Keep mash **20 min** at **72C**
- Sparge using **12.3 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 (76.9%)	80 %	5
Grain	Strzegom Karmel 150	0.5 kg (7.7%)	75 %	150
Grain	Płatki pszeniczne	1 kg (15.4%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	15 g	60 min	15.5 %
Boil	Amarillo	30 g	5 min	9.5 %
Dry Hop	Amarillo	20 g	3 day(s)	9.5 %
Dry Hop	Cascade	50 g	3 day(s)	6 %

## Yeasts

Name	Type	Form	Amount	Laboratory
us05	Ale	Dry	11.5 g	fermentis

## Extras

Type	Name	Amount	Use for	Time
Herb	mięta	10 g	Boil	10 min