

# kolendrowa apa

- Gravity **11.4 BLG**
- ABV **4.6 %**
- IBU **21**
- SRM **4.1**

## Batch size

- Expected quantity of finished beer **15 liter(s)**
- Trub loss **5 %**
- Size with trub loss **15.8 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **19 liter(s)**

## Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **10.2 liter(s)**
- Total mash volume **13.6 liter(s)**

## Steps

- Temp **68 C**, Time **60 min**
- Temp **72 C**, Time **20 min**
- Temp **76 C**, Time **5 min**

## Mash step by step

- Heat up **10.2 liter(s)** of strike water to **76C**
- Add grains
- Keep mash **60 min** at **68C**
- Keep mash **20 min** at **72C**
- Keep mash **5 min** at **76C**
- Sparge using **12.2 liter(s)** of **76C** water or to achieve **19 liter(s)** of wort

## Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pale Ale	2 kg (58.8%)	79 %	6
Grain	Strzegom Pszeniczny	1 kg (29.4%)	81 %	6
Grain	Płatki owsiane	0.4 kg (11.8%)	85 %	3

## Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Marynka	10 g	60 min	10 %
Aroma (end of boil)	Amarillo	20 g	5 min	9.5 %

## Yeasts

Name	Type	Form	Amount	Laboratory
Danstar - Nottingham	Ale	Slant	150 ml	Danstar

## Extras

Type	Name	Amount	Use for	Time
Spice	kolendra	15 g	Boil	5 min
Spice	skórka pomarańczy	15 g	Boil	5 min